
CENTRAL AMERICA & MEXICO POLICY INITIATIVE

MIGRANT DEATH PREVENTION AND THE BORDER PATROL'S MISSING MIGRANT PROGRAM

FALL 2023 – SPRING 2024



Lyndon B. Johnson School of Public Affairs

Policy Research Project Report

Number 225

**Migrant Death Prevention and the
Border Patrol's Missing Migrant Program**

Project Directed by

Stephanie Leutert

A report by the Policy Research Project

on Migrant Safety and Mortality in South Texas

April 2024

The LBJ School of Public Affairs publishes a wide range of public policy issue titles.

ISBN-10: 978-1-951006-20-4

©2024 by The University of Texas at Austin

All rights reserved. No part of this publication or any corresponding electronic text and/or images may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Cover design by Alison Prince

Policy Research Project Participants

Authors

Miranda Best Campos, B.A. (International Studies and Latin America Studies), University of Utah

Igor Magalhães, B.A. (Government and History), University of Texas at Austin

Elizabeth Morales, B.A. (Communication Arts), University of the Incarnate Word

Sarah Santillanes, Ph.D. (Language, Literacy, and Sociocultural Studies), University of New Mexico

Project Director

Stephanie Leutert, Director, Central America and Mexico Policy Initiative, Robert Strauss Center for International Security and Law, The University of Texas at Austin

Partnerships and Acknowledgments

The following report is the result of a year-long investigation by graduate students at the LBJ School of Public Affairs at the University of Texas at Austin. These students were part of a Policy Research Project (PRP) that examined migrant deaths along the U.S.-Mexico border and the policy and enforcement structures that have made them increasingly common.

The research was conducted in collaboration with the Southern Border Community Coalition (SBCC). The SBCC is an organization that brings together networks and organizations from across the southern border to promote policies that improve border residents' quality of life.

The PRP and corresponding travel and field research was made possible by the Robert Strauss Center for International Security and Law at the University of Texas at Austin. The authors would also like to thank the many people who spoke with them about migrant deaths in South Texas. This includes through phone interviews and in-person meetings during trips to Brooks County and the Rio Grande Valley.

Table of Contents

List of Acronyms	6
Foreword	7
Executive Summary	8
Chapter 1: History of Migrant Deaths in South Texas	9
History of Restrictive U.S. Immigration Policies	9
History of Border Enforcement	13
History of Migrant Deaths in South Texas	15
Chapter 2: Current Migrant Death Dynamics in South Texas	19
Overall Migrant Deaths	19
Drownings in the Rio Grande	24
Exposure to the Elements	26
Vehicle-Related Deaths	27
Chapter 3: The Border Patrol's Migrant Death Response	30
Historical Migrant Death Responses	30
The Border Patrol's Missing Migrant Program	31
Primary Challenges for Death Prevention Activities	34
Chapter 4: Recommendations	37
1. Collect Additional Data and Evaluate Rescue Beacons and 911 Placards	37
2. Improve Rescue Beacons and 911 Placards	38
3. Expand the Missing Migrant Program's Best Practices	39
4. Explore New Approaches to Prevent Migrant Deaths	40
Endnotes	42

List of Acronyms

BORSTAR	Border Patrol Search Trauma and Rescue Unit
BSITS	Border Safety Initiative Tracking System
EMILY	Emergency Integrated Lifesaving Lanyard
IIRIRA	Illegal Immigration Reform and Immigrant Responsibility Act
IRCA	Immigration Reform and Control Act
UNHCR	United Nations High Commissioner for Refugees

Foreword

The Lyndon B. Johnson School of Public Affairs has established interdisciplinary research on policy problems as the core of its educational program. A major element of this program is the nine-month Policy Research Project, during which one or more faculty members direct the research of ten to twenty graduate students of diverse disciplines and academic backgrounds on a policy issue of concern to a government or nonprofit agency. This “client orientation” brings students face-to-face with administrators, legislators, and other officials active in the policy process and demonstrates that research in a policy environment demands special knowledge and skill sets. It exposes students to challenges they will face in relating academic research and complex data to those responsible for the development and implementation of policy, and teaches them how to overcome those challenges.

The curriculum of the LBJ School is intended not only to develop effective public servants, but also to produce research that will enlighten and inform those already engaged in the policy process. The project that resulted in this report has helped to accomplish the first task; it is our hope that the report itself will contribute to the second. Neither the LBJ School nor The University of Texas at Austin necessarily endorses the views or findings of this report.

JR DeShazo
Dean

Executive Summary

For more than a century, migrants have died in South Texas while attempting to enter the United States. These deaths began in the late 1800s after the U.S. Congress passed its first restrictive immigration policies. At the time, some migrants responded to these restrictions by taking clandestine routes to enter the country. Over the following decades, restrictive immigration policies and enforcement efforts have continued to push migrants onto remote and dangerous pathways, with hundreds of migrants dying along the U.S.-Mexico border each year.

In South Texas, most migrant deaths occur from three main risks: exposure to the elements, drowning in the Rio Grande, and vehicle accidents. From 2000 to 2022, the Border Patrol recorded nearly 4,000 migrant deaths in South Texas. The majority of these deaths were from heat-related conditions—such as hyperthermia and dehydration—from migrants circumventing Border Patrol checkpoints on foot. The second most common cause of death was drowning in the Rio Grande, from migrants attempting to swim, wade, or float across the river on boats, rafts, and inner tubes. While the third most common cause of death was vehicle-related, with migrants dying in car crashes and suffocating in concealed spaces.

Since the 1980s, the Border Patrol has recognized migrant deaths along the U.S.-Mexico border and launched various death prevention activities. In 2017, the Border Patrol began its most recent border-wide initiative: the Missing Migrant Program. This initiative aims to prevent migrant deaths, locate migrants in distress, and identify and return migrant remains to their loved ones. As part of its death prevention efforts, the Missing Migrant Program places rescue beacons and 911 placards in remote areas, along with water rescue placards near the Rio Grande. However, the Missing Migrant Program's death prevention activities face multiple challenges that limit their effectiveness. These challenges include migrants' hesitation to seek medical help from the Border Patrol, migrants' inability to utilize rescue beacons and 911 placards, and the Border Patrol's varied rescue response for a migrant in distress.

This report focuses on migrant deaths in South Texas and the Missing Migrant Program's death prevention activities. It is divided into four chapters. The first chapter provides a historical overview of U.S. immigration policy, border enforcement efforts, and migrant deaths in South Texas. The second chapter analyzes current migrant death dynamics in South Texas. The third chapter examines the Border Patrol's response to migrant deaths, with a focus on the Missing Migrant Program's death prevention activities. Finally, the fourth chapter offers recommendations on how the Missing Migrant Program could reduce migrant deaths along the U.S.-Mexico border.

Chapter 1: History of Migrant Deaths in South Texas

The current U.S.-Mexico border is a relatively new development. In 1821, Mexico declared its independence from the Spanish Empire and created the first official border between the newly established country of Mexico and the United States.¹ At that time, the U.S.-Mexico border ran north of Texas and the state was fully within Mexico. However, Mexico's newfound control of the area did not last long. In 1836, Texas declared its independence from Mexico as the independent Republic of Texas, and set the Rio Grande as its southernmost boundary.²

Yet, Mexico disputed this international boundary. While Texas claimed the territory north of the Rio Grande, Mexico insisted that the Nueces River—which runs through Corpus Christi—was Texas' official southern border.³ In 1845, this issue erupted, as Texas joined the United States and sparked the Mexican American War. After three years, the U.S. military overpowered the Mexican forces, and the two countries ended the conflict with the Treaty of Guadalupe Hidalgo.⁴ As part of this treaty, Mexico ceded a large part of its northwestern territory to the United States and affirmed Texas' border as the Rio Grande.⁵ⁱ

At this time, migration was not a significant policy issue along the new U.S.-Mexico border. However, it was becoming a bigger issue on both the United States' east and west coasts. Throughout the Northeast, states were concerned about the various types of “undesirable” European migrants who were arriving on their shores.⁶ While, in the mid-nineteenth century, western states were increasingly unhappy with Chinese laborers in the mining and railroad industries. In particular, Anglo workers saw these migrants as competition and blamed them for limited employment opportunities, suppressed wages, and poor working conditions. These workers also harshly judged Chinese customs and traditions, considering them inferior and incompatible with American culture.⁷

Up to this point, each U.S. state regulated migration into their territory and could pass legislation to ban or limit the rights of specific migrant populations. For example, in the late 1700s, New York and Massachusetts passed legislation to ban “importing paupers.”⁸ⁱⁱ Additionally, California passed several laws that restricted Chinese migration into the state and imposed discriminatory fees on Chinese workers.⁹ Yet, in the mid-to late-1800s, the Supreme Court began ruling that only the U.S. federal government held the constitutional authority to regulate migration.¹⁰ As a result, the federal government began turning to immigration issues, with long-lasting effects for migration dynamics and migrant deaths along the border.

History of Restrictive U.S. Immigration Policies

The Chinese Exclusion Act and the Asiatic Barred Zone

The United States' first federal immigration restriction targeted Chinese citizens. In 1882, the U.S. Congress passed the Chinese Exclusion Act, which barred Chinese laborers—skilled and

ⁱ The remainder of the current U.S.-Mexico border was finalized in 1854 with the Gadsden Purchase. As part of this deal, Mexico sold parts of modern-day New Mexico and Arizona to the United States for \$10 million.

ⁱⁱ In 1788, New York passed its first restrictive immigration law, and, in 1794, Massachusetts passed its own legislation.

unskilled—from entering the country for ten years.ⁱⁱⁱ The Act also prevented Chinese nationals from obtaining U.S. citizenship.¹¹ However, the legislation exempted merchants, teachers, students, and travelers, and did not immediately achieve its intended goal of completely halting Chinese migration.

Notably, the Chinese Exclusion Act created the first group of unauthorized migrants, as newly banned Chinese laborers began to cross between ports of entry along the U.S.-Canada and U.S.-Mexico borders.¹² At first, this practice was concentrated along the U.S.-Canada border, but within a few years, Chinese nationals were also crossing clandestinely from Mexico into the United States.^{iv} These Chinese migrants also constituted the first migrant deaths. During these early years, Chinese migrants drowned in the Rio Grande, perished from exposure to the elements in California's deserts, and suffocated in train boxcars.¹³

Eventually, the U.S. Congress expanded these immigration restrictions to include all individuals from Asia. In 1907, Japan's government agreed to block its citizens from immigrating to the United States as part of a "Gentlemen's Agreement" with the United States.¹⁴ While in 1917, an Immigration Act instituted an "Asiatic Barred Zone," which prohibited Asian and Middle Eastern individuals from entering the United States unless they were government officials, students, merchants, or temporary travelers for entertainment.¹⁵

Categorical Restrictions, Head Taxes, and a Literacy Test

After the Chinese Exclusion Act, the U.S. Congress passed laws to ban additional populations. These laws included the Immigration Act of 1882, the Foran Act of 1885, the Immigration Act of 1891, the Immigration Act of 1907, and the Immigration Act of 1917, which all created a list of "undesirable" migrants. Specifically, these pieces of legislation banned anyone deemed to be a criminal, radical, anarchist, polygamist, contract laborer, mentally or physically unfit, sick, impoverished, illiterate, or likely to become a "public charge."¹⁶ These restrictions aimed to protect Americans from migrants' perceived threats—such as the spread of disease and crime—and to appease labor unions by protecting U.S. jobs from foreign competition.¹⁷

These immigration policies also created a head tax for arriving migrants. The Immigration Act of 1882 created a 50 cent head tax for anyone entering the country through a coastal port of entry.¹⁸ However, for the following 35 years, the head tax did not apply to individuals crossing the U.S.-Canada and U.S.-Mexico borders. In 1917, the Immigration Act increased the tax to eight dollars and applied it to all migrants entering the country, regardless of their port of entry. This legislation also required literacy tests for all people seeking to reside in the United States, which placed another obstacle for would-be migrants.¹⁹

Similar to the Chinese Exclusion Act, the categorical restrictions, head tax, and literacy test did not deter foreigners from attempting to enter the United States. Instead, many newly banned individuals simply shifted their migration routes from eastern seaports to the U.S.-Mexico border,

ⁱⁱⁱ In 1892, Congress extended the ban on Chinese workers for an additional 10 years, and, in 1902, it made the ban permanent.

^{iv} Some Chinese migrants also attempted to sneak through ports of entry disguised as Mexicans, since they were rarely inspected.

where many attempted to cross undetected.²⁰ Even Mexicans, who historically enjoyed largely unfettered access to the United States, began to circumvent ports of entry. From 1917 to 1929, historians estimate that hundreds of thousands of Mexican nationals crossed the border undetected.²¹

Nationality Quotas and the Undesirable Aliens Act of 1929

In the 1920s, a wave of nativism and rising unemployment exacerbated fears around potential mass migration from Europe in the post-World War I era. In response, the U.S. Congress imposed numerical limits on migrants based on their countries of origin.²² The Emergency Quota Act of 1921 created a cap of 350,000 annual visas and limited a country's quota to 3 percent of its citizens' makeup in the 1910 U.S. Census—effectively prioritizing migrants from Western and Northern Europe.²³ The Immigration Act of 1924 slashed the visa cap to 150,000 slots and adjusted the quota to 2 percent of the 1890 U.S. Census.²⁴ It also required prospective migrants to apply for visas in their home country before arriving at a U.S. port of entry.²⁵

While these quotas limited the number of European migrants, they did not apply to individuals from the Western Hemisphere.²⁶ This carve-out was primarily for American agricultural and mining employers that relied heavily on Mexican laborers. At the time, most Mexican laborers came to the United States for seasonal work and then returned to Mexico, which made this provision less politically contentious. However, as more Mexican nationals began permanently settling in the United States, immigration restrictionists began pressuring the U.S. government to limit their entry.²⁷ Accordingly, in 1928, the State Department began encouraging its officers in Mexico to aggressively interpret immigration restrictions in order to reduce the number of Mexican nationals migrating to the United States.²⁸ By 1931, the number of Mexicans receiving visas had dropped by 94 percent, and, after 1930, consular officers stopped granting visas to Mexican laborers.²⁹

Around this time, the U.S. Congress also increased the penalties for individuals who circumvented ports of entry. In 1929, the Undesirable Aliens Act made unauthorized crossing a misdemeanor that was punishable by up to a year of imprisonment and fines.³⁰ Once deported, any foreigner who was caught reentering the United States could be charged with a felony that was punishable by up to two years in prison and a \$1,000 fine.³¹ In order to avoid detection and subsequent punishment, migrants began to seek out ever more remote and dangerous clandestine crossing routes.³²

The Bracero Program

In the 1940s, U.S. immigration policies shifted significantly. During World War II, American men entered military service and the U.S. agriculture sector needed more labor. In response, in 1942, the U.S. government created the Bracero Program as a short-term solution. The Bracero Program provided a legal means for Mexican men to temporarily work in the United States' agricultural and railroad industries.

Initially, the Mexican government banned Texas from joining the Bracero Program due to its “racist and discriminatory treatment of Mexicans.”³³ Nevertheless, Mexican workers continued to

arrive on Texas farms and many were “converted” into legal workers.³⁴ In 1947, the Bracero Program sent 31,331 Mexican laborers to California and Arizona, but the Border Patrol simultaneously legalized 55,000 workers on Texas farms.³⁵ Around this time, Mexico began gradually removing restrictions on Bracero workers arriving in Texas, and, by 1949, half of all of the Bracero Program’s laborers were working in the state.³⁶

However, during the Bracero Program, there was a simultaneous increase in the number of unauthorized Mexican laborers entering the United States. There were several reasons behind this unexpected dynamic. First, in the late 1930s, Mexican laborers were being uprooted from their homes amid low harvests and scarce employment opportunities.³⁷ Second, not all laborers were able to obtain a Bracero contract, as the Mexican government’s contract disbursement process was often rigid and politically motivated. Third, as Braceros sent money home to their families in Mexico, an increasing number of Mexicans became interested in making a similar journey to the United States. These factors led some Mexican laborers to circumvent the formal recruitment process and cross the Rio Grande, where they easily found work in Texas despite their unauthorized status.^v By the 1950s, historian Peter Kirstein estimated that unauthorized Mexican laborers outnumbered Bracero workers by four to one.³⁸

In December 1964, the U.S. Congress voted to end the Bracero Program with a two-year phase-out period.³⁹ At the time, the Bracero Program was under fire from various directions. It was being criticized for both exploiting migrant workers and for harming U.S. farm workers.⁴⁰ Policymakers also believed that increased agricultural mechanization would reduce employers’ demand for manual labor. However, after the Bracero Program ended, U.S. agricultural businesses continued to hire Mexican laborers, and many workers continued to cross the Rio Grande as unauthorized migrants.

The Rise of Border Enforcement Legislation

From 1964 to 1996, the U.S. Congress passed several pieces of immigration focused legislation. The first major legislation was the 1965 Immigration and Nationality Act, which repealed the nationality-based quotas from the 1920s and focused U.S. immigration law on family reunification and labor market demands. These changes created an annual global cap of 290,000 visas and limited Western Hemisphere migration to 120,000 visas for the first time.⁴¹ In 1976, President Ford amended the Act to limit each Western Hemisphere country to 20,000 annual visas.⁴² This adjustment particularly affected Mexico, as it was the only country in the region that regularly exceeded the 20,000 annual visa limit.

The 1965 Immigration and Nationality Act and the 1976 amendment made it even more difficult for Mexican nationals to obtain the proper documentation to enter the United States. As a result, more people began attempting to enter the United States between ports of entry. This trend was reflected in the number of Border Patrol apprehensions along the U.S.-Mexico border. From 1965 to 1979, the Border Patrol’s apprehensions surged from 40,000 encounters to nearly 800,000 encounters.⁴³

^v The Immigration and Nationality Act of 1952 implicitly tolerated this arrangement by shielding employers. Specifically, this legislation made the distinction between “employing” and “harboring” an unauthorized migrant, which allowed farm owners to knowingly hire unauthorized laborers without any criminal consequences.

In response, U.S. policymakers began focusing more on border enforcement. In 1986, Congress passed the Immigration Reform and Control Act (IRCA), which prohibited U.S. employers from hiring individuals without valid work authorization and required additional funding for the Immigration and Naturalization Service (INS) and Border Patrol.⁴⁴ IRCA also provided a legalization pathway for more than 2 million migrants who were already living in the United States. However, it did not stop unauthorized migration. In 1996, Congress also passed the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), which increased border enforcement funding and expanded immigration detention, non-citizen deportations, and penalties for unauthorized re-entry into the United States.⁴⁵

History of Border Enforcement

During the early- and mid-1800s, individual states screened the many migrants arriving at their shores. However, following the 1882 and 1885 federal immigration laws, the U.S. Customs Service deployed inspectors to assist state migration authorities and stop Chinese migrants and contract laborers from entering the United States. Yet, the primary port enforcement challenge at the time was the lack of inspectors compared to the sheer number of migrants arriving each day. In 1889, New York's Castle Gardens Immigration Station only had two inspectors to process the approximately 6,000 migrants who arrived daily.⁴⁶ The Immigration Act of 1891 attempted to address these issues by creating the Bureau of Immigration within the Department of the Treasury.^{vi} However, the Bureau of Immigration was also understaffed and underfunded relative to the number of arriving migrants.

If the United States had limited enforcement at ports of entry, it was practically nonexistent in the vast spaces between ports of entry. As Chinese laborers began entering the United States on clandestine routes, the U.S. Customs Service dispatched inspectors to the U.S.-Mexico border.⁴⁷ In 1904, the Bureau of Immigration also created the Mounted Guard, the precursor to the Border Patrol, with 75 inspectors who rode on horseback and patrolled the U.S.-Mexico and U.S.-Canada borders.⁴⁸ In 1915, Congress sanctioned a separate unit of mounted guards, commonly known as the Mounted Inspectors.⁴⁹ However, all of these enforcement efforts were sporadic, dependent on available resources, and of varying effectiveness.

The Border Patrol

In 1924, the U.S. Congress passed an Appropriations Act that allocated \$1 million to establish today's Border Patrol.⁵⁰ These first agents were tasked with apprehending European and Asian migrants and disrupting alcohol smuggling during the Prohibition era. The agency began with approximately 450 men along both the U.S.-Canada and U.S.-Mexico borders, and about 50 to 80 agents stationed in South Texas.⁵¹ Initially, these Border Patrol agents lacked resources and even a legal mandate to pursue migrants.⁵² However, subsequent legislation addressed some of these

^{vi} In 1903, the Bureau of Immigration was moved to the new Department of Commerce and Labor. In 1906, this Department split into two separate entities, and the Bureau of Immigration merged with the Bureau of Naturalization within the Department of Labor. In 1913, the Bureau of Immigration was re-established as its own entity.

issues and, by the 1930s, the Border Patrol was participating in its first campaign to deport Mexicans during the Great Depression.^{53vii}

During the 1940s and 1950s, the Border Patrol adopted a seesaw style for its border enforcement.^{viii} On one side, it assisted local growers in obtaining an appropriate workforce.⁵⁴ Specifically, Border Patrol agents could grant parole to apprehended Mexican laborers, allowing them to work for agricultural employers and maintain their desired labor force. On the other side, the Border Patrol also cracked down on migrants when their numbers were deemed to be too high. For example, in 1954, the Border Patrol launched Operation Wetback, which led to approximately 1 million apprehensions and deportations. As part of this operation, Border Patrol agents flew planes over ranches to find workers and sent agents on the ground to set up roadblocks.⁵⁵

Overall, in the 1940s and 1950s, the Border Patrol settled into a three-pronged enforcement strategy: patrols along the international border, ranch checks, and highway checkpoints.⁵⁶ While the Border Patrol engaged in all of these activities, they often leaned into highway checkpoints, which allowed them to cover more ground with a limited number of agents. Smugglers responded to these enforcement efforts in various ways, such as by concealing migrants in cargo trucks and vehicles, circumventing the checkpoints on foot, and timing their operations for the Border Patrol's non-operating hours.⁵⁷

During the following five decades, the Border Patrol received increasing amounts of funding and expanded its personnel and enforcement efforts. Between 1966 and 1993, the Border Patrol's budget humped from \$49 million to \$367 million.⁵⁸ While the number of Border Patrol agents nearly tripled, from 1,491 in 1966 to 3,965 in 1993.⁵⁹ The increased funding also allowed for more advanced technology and equipment, such as helicopters, electronic intrusion-detection ground sensors, closed circuit television systems, and military-issued rifles.⁶⁰

The Prevention Through Deterrence Strategy

In the mid-1990s, the Border Patrol shifted its enforcement strategy.⁶¹ Until this time, Border Patrol agents had pursued migrants once they were on U.S. territory. However, in 1993, El Paso's Border Patrol launched Operation Hold the Line to displace and deter migrants within the city's downtown.^{62ix} As part of this operation, the Border Patrol stationed 400 agents along a 20-mile stretch of the Rio Grande. This show of force was joined by four helicopter patrols and teams of agents who patched holes in the border fence.⁶³

^{vii} As U.S. labor demand plummeted and unemployment soared—eventually peaking at 25 percent in 1933—politicians blamed migrant workers for stealing U.S. citizens' jobs. In response, the U.S. government initiated a repatriation campaign to send Mexican citizens back to Mexico. While some migrants willingly accepted free train rides to Mexico, many others were deceived or pressured into repatriations. As a result, U.S. authorities deported hundreds of thousands of Mexican nationals, including U.S. citizens of Mexican descent.

^{viii} In the 1950s, sociologists Lyle Saunders and Olen Leonard wrote: "The role of the Border Patrol at present is like that of a balance wheel. They let in enough wetbacks to do the local work quickly and cheaply; but then they send out enough to prevent serious overcrowding."

^{ix} The operation's original name was Operation Blockade. However, the Mexican government objected to this name, and the Border Patrol began using the name Operation Hold the Line.

Operation Hold the Line affected migration dynamics in various ways. Almost immediately, it decreased the number of migrants crossing the border in downtown El Paso—as migrants became stranded in Ciudad Juárez—and reduced the interaction between Border Patrol agents and El Paso’s residents. Over the longer term, it redirected labor migration from southern and central Mexico to other border areas and increased migrants’ time in El Paso, as they sought to reduce their number of crossing attempts.⁶⁴ In general, El Paso’s media coverage was positive toward Operation Hold the Line, and public opinion polls found that 84 to 95 percent of the city’s residents supported the approach.⁶⁵

In 1994, the Border Patrol announced its Prevention Through Deterrence strategy, which aimed to replicate Operation Hold the Line border-wide. This strategy focused on increasing the number of Border Patrol agents and targeted enforcement resources in specific urban areas. The Border Patrol predicted that the more personnel and resources would disrupt traditional migration routes and divert migrants to more “hostile terrain” where Border Patrol agents would have the tactical advantage.⁶⁶ The strategy included various phases, such as Operation Gatekeeper in San Diego (1994) and Operation Safeguard in Nogales (1995). As the Border Patrol implemented its Prevention Through Deterrence strategy in these cities, crossings became more difficult and some migrants shifted their routes to the Arizona desert and South Texas.

In 1997, the Border Patrol launched Operation Rio Grande in Brownsville as part of its Prevention Through Deterrence strategy. In particular, the Border Patrol in the Rio Grande Valley sector concentrated agents along a 2.5-mile stretch of the Rio Grande. The Border Patrol also invested in operational enhancements, including brush clearing, elevated observation posts, mobile night visions, floodlights, helicopters, high-speed patrol boats, and surveillance towers.⁶⁷ Despite these efforts, South Texas’ bushy topography proved less conducive to the strategy than El Paso’s wide-open canals.^{68x}

History of Migrant Deaths in South Texas

Since the United States’ first immigration restrictions, unauthorized migrants have taken clandestine pathways into South Texas and faced risks to their physical safety. These risks have primarily included drownings in the Rio Grande, life-threatening exposure to the elements while circumventing Border Patrol checkpoints on foot, and vehicle-related accidents, such as car crashes and suffocation in concealed spaces. The following sections cover each of these three types of deaths in South Texas.

Drownings in the Rio Grande

Historically, the most common cause of death among migrants in South Texas has been drowning in the Rio Grande. Since the Rio Grande serves as the international border between the United States and Mexico, migrants entering South Texas between ports of entry must cross the river. The river has varying widths and depths, and migrants typically wade or swim across or use boats, rafts, and inner tubes to float across. These crossings are perilous, as people may be swept away in the unpredictable currents, thrown in the water when their boats or rafts capsize, or pulled under when attempting to help someone in distress. Although these challenges pose dangers to even the

^x Some migrants in South Texas began shifting their crossing points further west toward McAllen.

strongest swimmers, they are especially pronounced for weak swimmers and adults carrying children or assisting others.

There are few historical accounts of the Rio Grande's earliest migrant drownings, with the first newspaper articles documenting cases from the 1920s. This media attention corresponds to an uptick in clandestine border crossings during this time. Several years earlier, the Immigration Act of 1917 had imposed a head tax and literacy test on all migrants, and more Mexican citizens had begun to cross the Rio Grande. However, some of these laborers never made it across. For example, in 1920, the *Arizona Republic* noted that 11 Mexican men drowned when their skiff overturned while crossing the river at night.⁶⁹ That same year, the *Arizona Republic* also highlighted the case of another presumed Mexican laborer who drowned while attempting to reach the United States.⁷⁰

In the 1940s and 1950s, even more unauthorized migrants began to enter the United States. These unauthorized migrants were often Mexican nationals who would work for a period of time in the United States and then return to Mexico. Since these workers were unable or unwilling to cross into the United States through a port of entry, they would traverse the Rio Grande to reach their job sites. However, these crossings continued to be dangerous. *The New York Times* reported near daily drownings at certain points.⁷¹ While in July 1949, the chairman of the Inter-American Relations Committee of the Rio Grande Valley Chamber of Commerce lamented the “tremendous loss of life” along the river.⁷²

Over the following decades, migrants continued to drown in South Texas and historical news articles periodically highlighted the deaths. In 1979, the *Corpus Christi Caller-Times* reported that U.S. authorities in Laredo collected 24 bodies from the river, and recovered another 20 bodies during January and February of the following year.⁷³ While in July 1987, *The Philadelphia Inquirer* claimed that 40 migrants had drowned in the Rio Grande over the preceding six months.⁷⁴ Between 1985 and 1998, a University of Houston's Center for Immigration Research study documented at least 516 migrant drownings in the Rio Grande.⁷⁵ However, this tally did not include any cases from the Mexican side of the river.

Exposure to the Elements

Over the past 140 years, the second most common cause of death among migrants in South Texas has likely been exposure to the elements. Since the 1940s, the Border Patrol has constructed and utilized checkpoints on north-bound South Texas highways. These checkpoints are typically located on highways and secondary roads—between 25 to 100 miles away from the physical border—and can be brick and mortar buildings or more temporary structures.⁷⁶ At these checkpoints, Border Patrol agents inspect vehicles and question travelers to determine their immigration status.

Migrants who are seeking to reach the U.S. interior must pass through or circumvent these checkpoints. To accomplish this feat, migrants may hide in vehicles or tractor-trailers or walk through the ranchland brush. Each of these methods involves risks, but most migrants die while hiking around the checkpoints on foot. This clandestine process involves several steps. First, smugglers drive the group of migrants to a predetermined location before the checkpoint. Then, guides lead the group through the ranchland for anywhere from several hours to multiple days.

Finally, once the group is north of the checkpoint, another vehicle picks the migrants up and drives them to stash houses in San Antonio or Houston.

While walking through the South Texas ranchland, migrants face numerous risks. In South Texas, temperatures can regularly exceed 100°F (37.8°C) during summer months and drop below freezing in the winter. These temperatures can cause hyperthermia, dehydration, hypothermia, and exacerbate underlying health conditions. There is little groundwater in the county, such as rivers and lakes, and migrants often resort to drinking water from contaminated cattle troughs. Individuals walking through the ranchland also have to contend with a range of other dangers, including rattlesnakes, ticks, and prickly cacti.⁷⁷

For as long as migrants have hiked around the checkpoints, some individuals have likely died. In Julian Samora's 1971 book *Los Mojados: The Wetback Story*, a graduate student, Jorge Bustamante, goes undercover as a Mexican laborer and provides the earliest documentation of migrants dying in South Texas ranchland.⁷⁸ In this book, Bustamante crosses the Rio Grande without authorization and attempts to reach the U.S. interior by hiking around the Falfurrias Border Patrol checkpoint. Along the way, he hears migrants' stories about discovering deceased migrants on the clandestine trails, including a badly decomposed set of migrant remains and another more recently deceased individual.

In the following decades, migrants continued to die around the Border Patrol checkpoints in South Texas.⁷⁹ In the early 1990s, dehydration deaths in South Texas were still relatively rare.⁸⁰ In a 1998 interview, Sheriff Cuellar of Kenedy County—where the Sarita Border Patrol checkpoint is located—reported that he had pulled at least one body from the brush every summer during the previous 30 years.⁸¹ However, by the late 1990s and early 2000s, the number of deaths from exposure to the elements began to increase. In August 1996, the *Monitor* reported that in the preceding three months, Border Patrol agents had found eight individuals who died from dehydration.⁸²

Vehicle-Related Accidents

The third most common historical cause of death among migrants in South Texas has likely been vehicle-related accidents. Migrants ride in vehicles during multiple parts of their clandestine journeys through South Texas. Drivers pick up migrants after they cross the Rio Grande, in order to transport them to nearby stash houses. Drivers also transport migrants in vehicles to pass through or circumvent Border Patrol checkpoints. For this latter part of the clandestine journey, migrants may hide in cars or tractor trailers or get dropped off and picked up while circumventing a checkpoint on foot.^{83xi}

Migrants face various risks while traveling in vehicles, such as car crashes and suffocation in concealed spaces. While migrants have likely died on South Texas highways since they began riding in vehicles, the first recorded vehicle-related migrant death took place in 1968. In this case, 44 Mexican nationals boarded a rental truck in Eagle Pass, Texas en route to Chicago.⁸⁴ However, the truck did not have ventilation, and two individuals succumbed to heatstroke by the time that

^{xi} In 1948, a *Hartford Courant* article reported that migrants in South Texas were being smuggled in truck refrigerators and gasoline tanks.

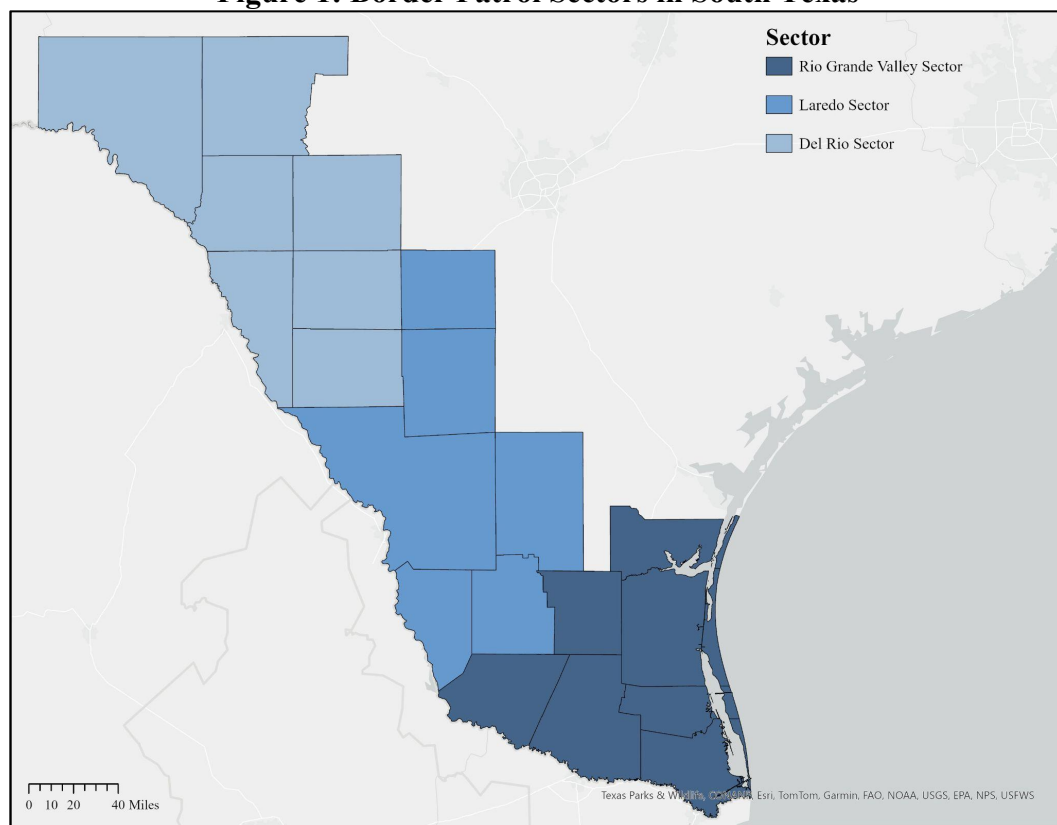
the vehicle reached San Antonio. Similarly, in 1982, a group of migrants boarded a tractor-trailer near Edinburg, Texas. When the air conditioning failed, four migrants from El Salvador died in the trailer's sweltering cargo area.⁸⁵ Throughout the years, migrants have also frequently died in car crashes, especially during highspeed pursuits with Border Patrol agents or other law enforcement entities.⁸⁶

Chapter 2: Current Migrant Death Dynamics in South Texas

Overall Migrant Deaths

Between 2000 and 2022, more than 4,000 migrants died in South Texas. Similar to historical migrant death trends, these contemporary deaths were primarily from drowning in the Rio Grande, exposure to the elements, and vehicle-related accidents. This chapter uses the Border Patrol's data to analyze migrant death trends in South Texas over the last two decades.^{xii} It covers overall migrant death patterns and decedent demographics within the Border Patrol's three South Texas sectors: the Del Rio sector, the Laredo sector, and the Rio Grande Valley sector.

Figure 1: Border Patrol Sectors in South Texas

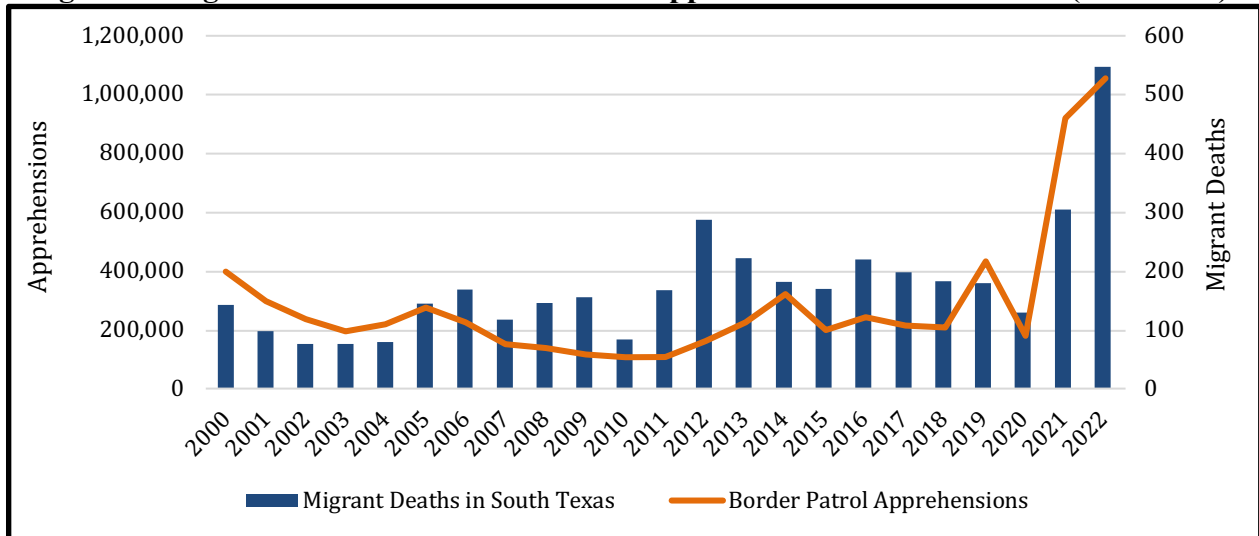


Authors' elaboration. Data source: U.S. Border Patrol

Over the past 20 years, the total number of migrant deaths fluctuated in South Texas. Between 2000 and 2020, the Border Patrol recorded between 75 and 285 migrant deaths each year. However, these numbers jumped upward in 2021 and 2022 to reach approximately 300 and 540 migrant death cases, respectively. This sharp spike is likely related to higher numbers of migrants crossing through the region during these years. In general, the number of migrant deaths in South Texas is correlated with the Border Patrol's total number of apprehensions in the region (see Figure 2).

^{xii} For fiscal years 2000 to 2021, this report uses a Border Patrol dataset that was provided through a Freedom of Information Act request. This dataset includes 3,419 cases for South Texas. For fiscal year 2022, the report relies on publicly available aggregate death data for the entire border.

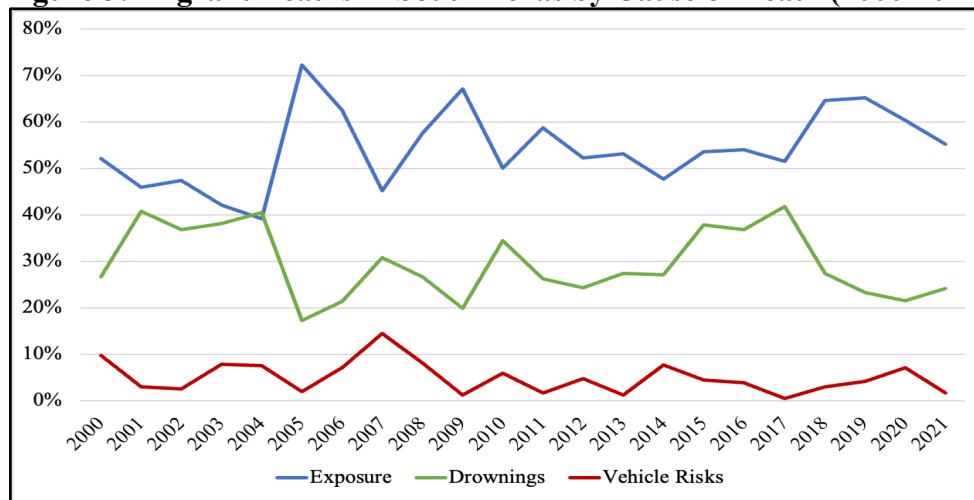
Figure 2: Migrant Deaths and Border Patrol Apprehensions in South Texas (2000-2022)



Authors' elaboration. Data source: U.S. Border Patrol

There is no single cause of death for migrants in South Texas. According to the Border Patrol's dataset, the most common cause of death was exposure to the elements, constituting more than 55 percent of the total cases. The second most common cause of death was drowning in the Rio Grande, which made up slightly more than 29 percent of the cases. (However, these drownings only reflect the cases where the individual washed up on the U.S. side of the river.) Vehicle-related deaths made up approximately 5 percent of the cases. While the remaining cases were linked to other causes of death, such as being hit by a train, homicide, and cardiac arrest.

Figure 3: Migrant Deaths in South Texas by Cause of Death (2000-2021)

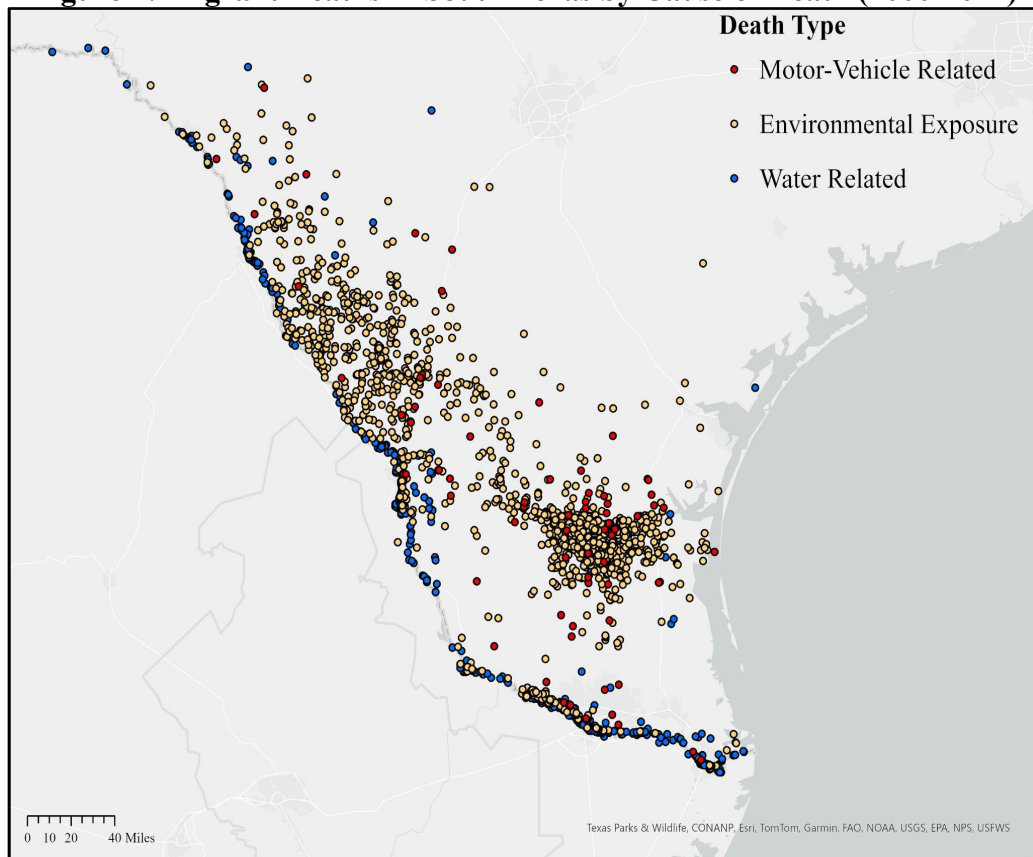


Authors' elaboration. Data source: U.S. Border Patrol

From 2000 to 2017, the Border Patrol's dataset includes GPS coordinates for 2,451 recovered remains in South Texas. This makes it possible to map how migrant deaths are spread across the region based on their specific causes. The vast majority of drownings occurred along the Rio Grande, and deaths related to exposure to the elements were concentrated around interior Border

Patrol checkpoints. Vehicle-related deaths were located both along the U.S.-Mexico border and in the Texas interior.

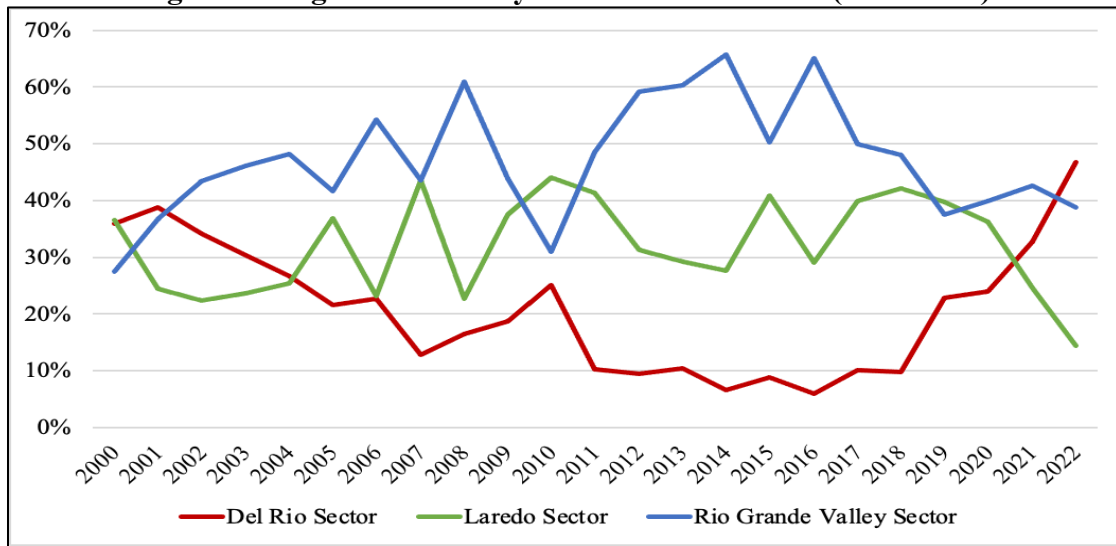
Figure 4: Migrant Deaths in South Texas by Cause of Death (2000-2017)



Authors' elaboration. Data source: U.S. Border Patrol

From 2000 to 2022, migrant death trends fluctuated across the three Border Patrol sectors. Overall, the Rio Grande Valley sector was the deadliest area in South Texas, totaling 48 percent of all migrant deaths. The second most deadly area was the Laredo sector, with 30 percent of all migrant deaths, and then the Del Rio sector, with 22 percent of the deaths. However, these dynamics shifted over time. For most of the time period, the Border Patrol reported the most migrant deaths in the Rio Grande Valley sector. However, in recent years, the Del Rio sector has emerged as the deadliest area. In fiscal year 2022, the Del Rio sector accounted for nearly half of all migrant deaths in South Texas. This is likely related to increasing migration through the Del Rio sector, with the number of apprehended migrants jumping from 15,800 in fiscal year 2018 to 480,000 in fiscal year 2022.⁸⁷

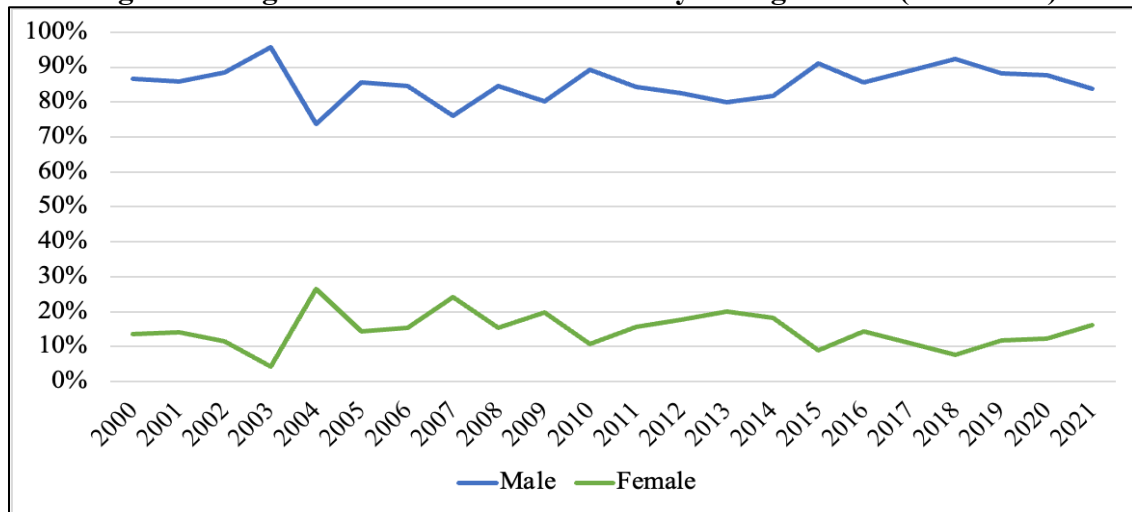
Figure 5: Migrant Deaths by Border Patrol Sector (2000-2022)



Authors' elaboration. Data source: U.S. Border Patrol

There is no single demographic profile of a deceased migrant in South Texas. From 2000 to 2021, the Border Patrol's person-level dataset contained information about the individual's biological sex for 87 percent of the cases.^{xiii} Of these cases, 85 percent of the decedents were male and the remaining 15 percent were female. This pattern was relatively stable over time. Within the dataset's timeframe, the composition of male victims generally hovered between 80 and 90 percent and never dropped below 70 percent.

Figure 6: Migrant Deaths in South Texas by Biological Sex (2000-2021)



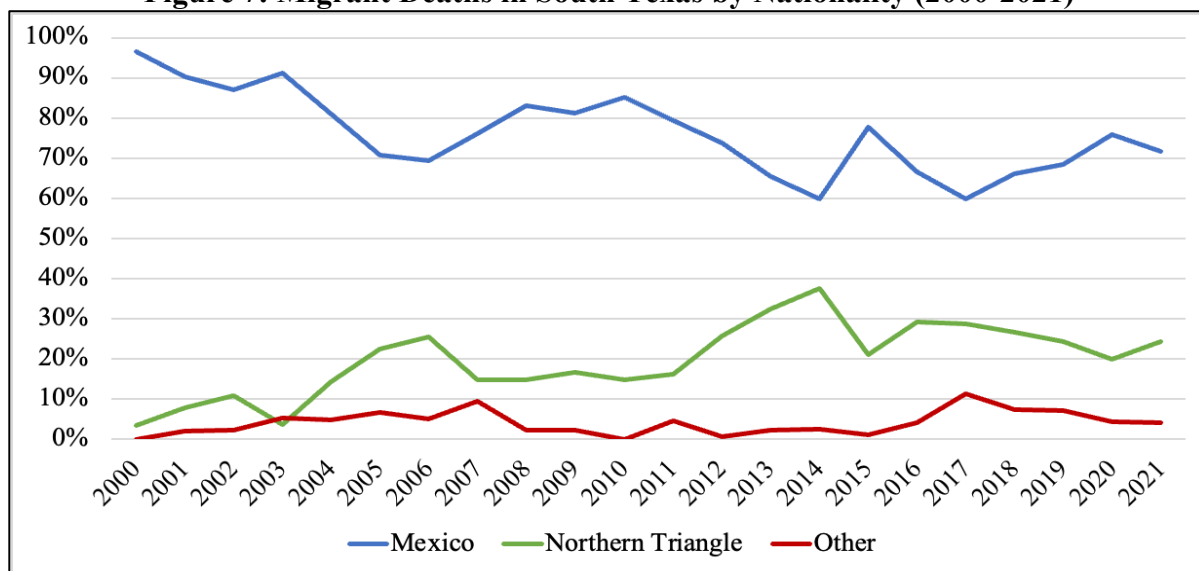
Authors' elaboration. Data source: U.S. Border Patrol

The deceased individuals also hailed from a range of countries. Within the dataset, 62 percent of the cases had a recorded nationality. Of these cases, most individuals were from Mexico (74 percent) and the Northern Triangle countries of El Salvador (8 percent), Guatemala (7 percent),

^{xiii} Officials may not be able to immediately determine the biological sex of skeletal remains.

and Honduras (7 percent). However, these nationality dynamics shifted over time. Since 2011, more migrants from the Northern Triangle have died along the U.S.-Mexico border. At its peak, in 2014, individuals from the Northern Triangle made up nearly 40 percent of migrant deaths in South Texas. The dataset also included decedents from other countries, such as Brazil, the Dominican Republic, Ecuador, and Nicaragua.

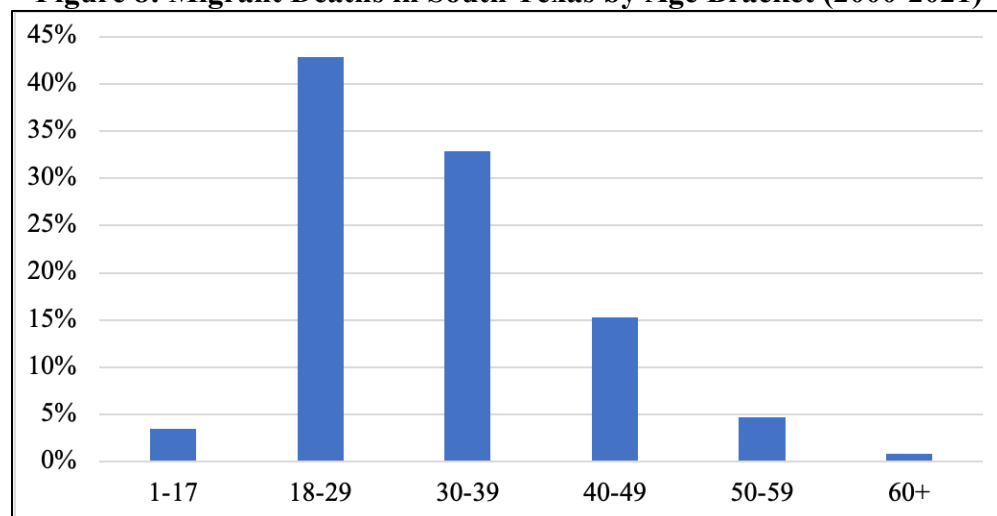
Figure 7: Migrant Deaths in South Texas by Nationality (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

From 2000 to 2021, the migrants who died in South Texas also spanned a wide age range. Within the dataset, 48 percent of the cases included the decedent's age. Of these cases, more than 75 percent of the individuals were between 18 and 39 years old. However, there was a wide age range, and the dataset included cases of both deceased infants and elderly individuals. Notably, migrant drownings were the only cause of death that involved small children.

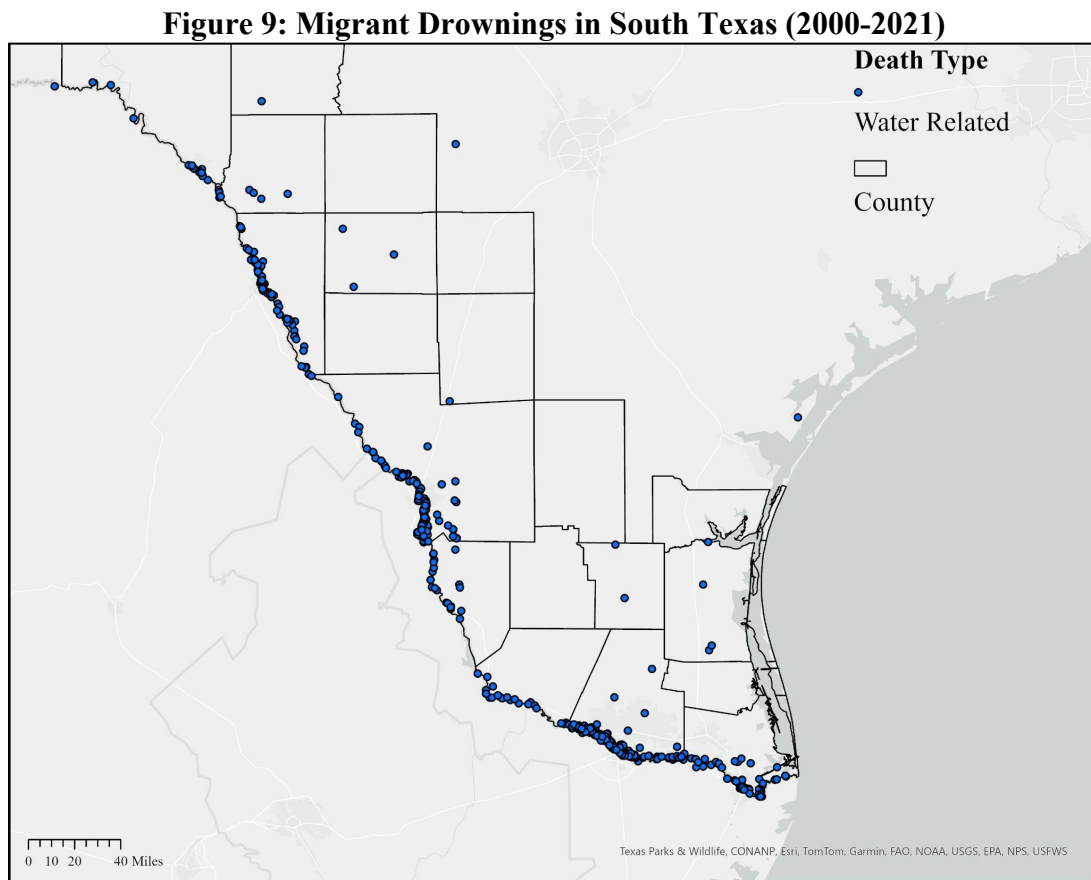
Figure 8: Migrant Deaths in South Texas by Age Bracket (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

Drownings in the Rio Grande

From 2000 to 2021, the Border Patrol reported 926 drownings in South Texas.^{xiv} These deaths were concentrated in the Rio Grande and occurred along the length of the South Texas-Mexico border. Notably, the Border Patrol’s drowning data only captures cases where the bodies washed up on the U.S. side of the Rio Grande, as Mexican authorities document migrant drownings for their side of the river. As a result, the data likely represents only half of the true number of migrant drownings.

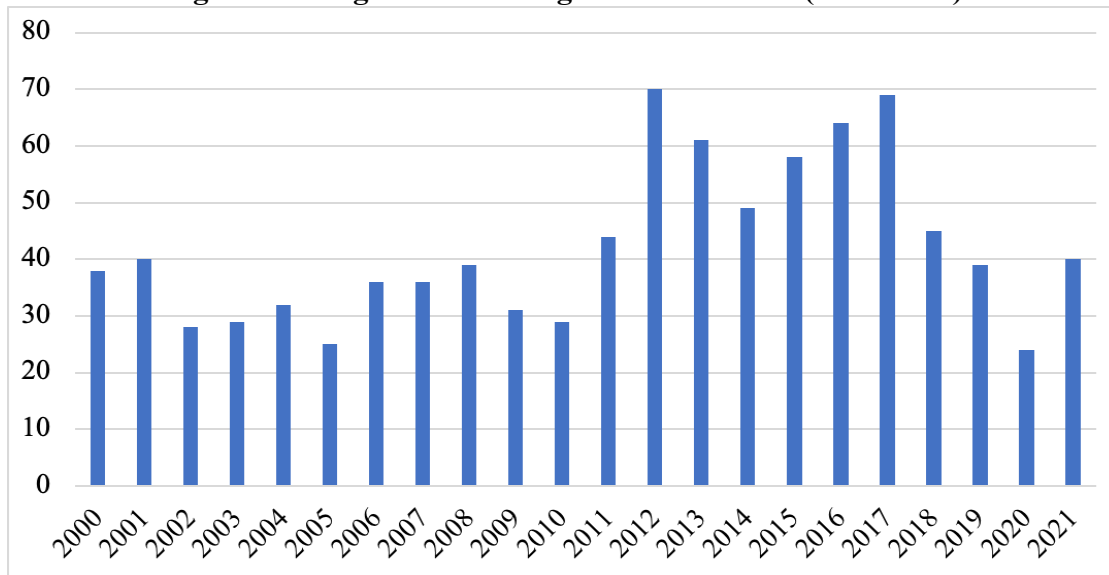


Authors' elaboration. Data source: U.S. Border Patrol

Over time, the number of migrants drowning in the Rio Grande has fluctuated. From 2000 to 2021, the Border Patrol recorded an average of 42 migrant drownings each year. However, migrant drowning numbers were likely much higher for fiscal year 2022 (see Figure 2). The Border Patrol has not yet released sector-specific information, but migrant drownings border-wide jumped from 78 cases in 2021 to 172 cases in 2022.⁸⁸

^{xiv} The Border Patrol categorizes drownings as “water-related” deaths, and this section analyzes cases with this coding.

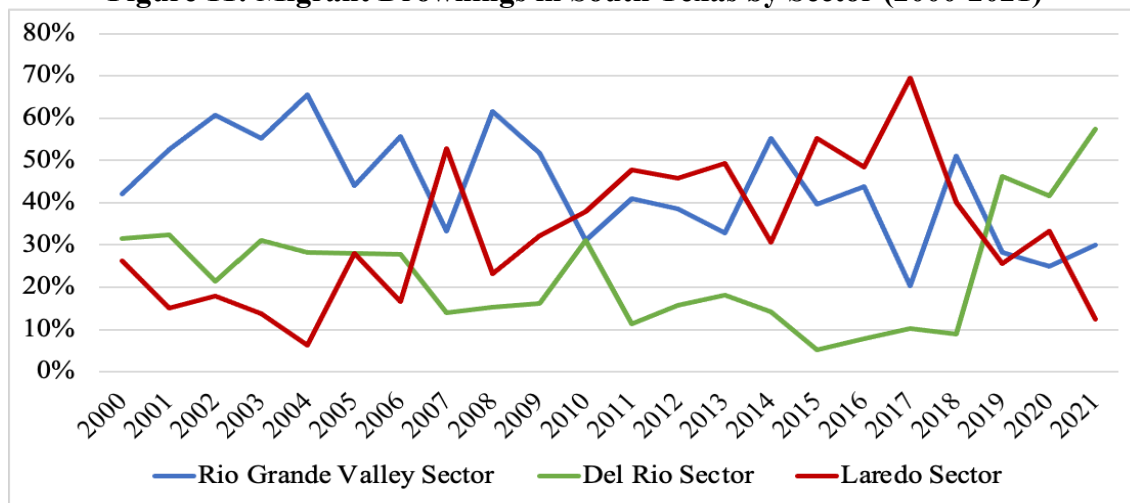
Figure 10: Migrant Drownings in South Texas (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

From 2000 to 2021, migrant drownings fluctuated across the three Border Patrol sectors. In the early 2000s, the Border Patrol reported the highest number of drownings in the Rio Grande Valley sector. While from 2007 to 2017, the dataset also recorded high numbers of drownings in the Laredo sector. Finally, in recent years, the Del Rio sector has seen a spike in the number of migrant drownings, and has now surpassed the other two sectors.

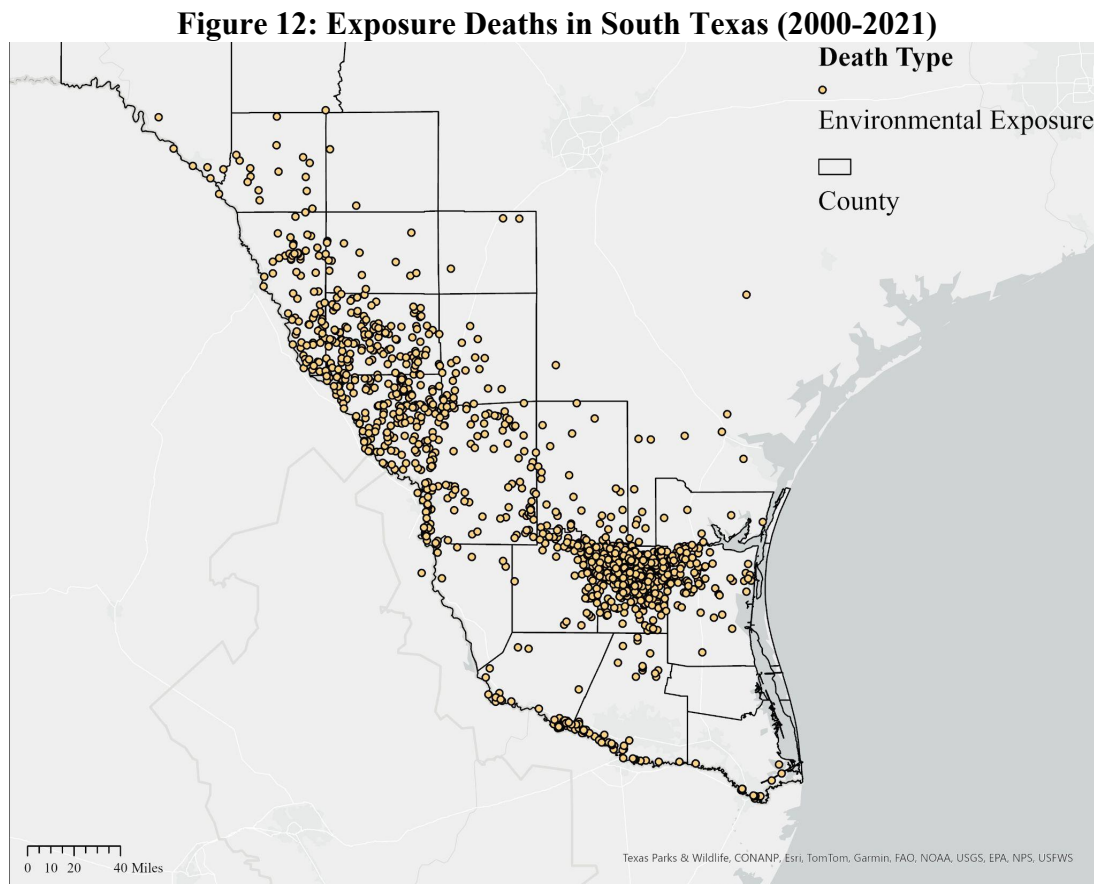
Figure 11: Migrant Drownings in South Texas by Sector (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

Exposure to the Elements

From 2000 to 2021, the Border Patrol recorded 1,796 cases of migrants who died in South Texas from exposure to the elements.^{xv} The vast majority of these deaths were related to heat exposure (93 percent) and the remaining deaths were due to cold exposure (7 percent). Migrants died from exposure to the elements in two specific areas in South Texas: along the Texas-Mexico border, as migrants hiked from the Rio Grande to vehicle pick-up locations, and in the Texas interior, as migrants circumvented Border Patrol checkpoints on foot.

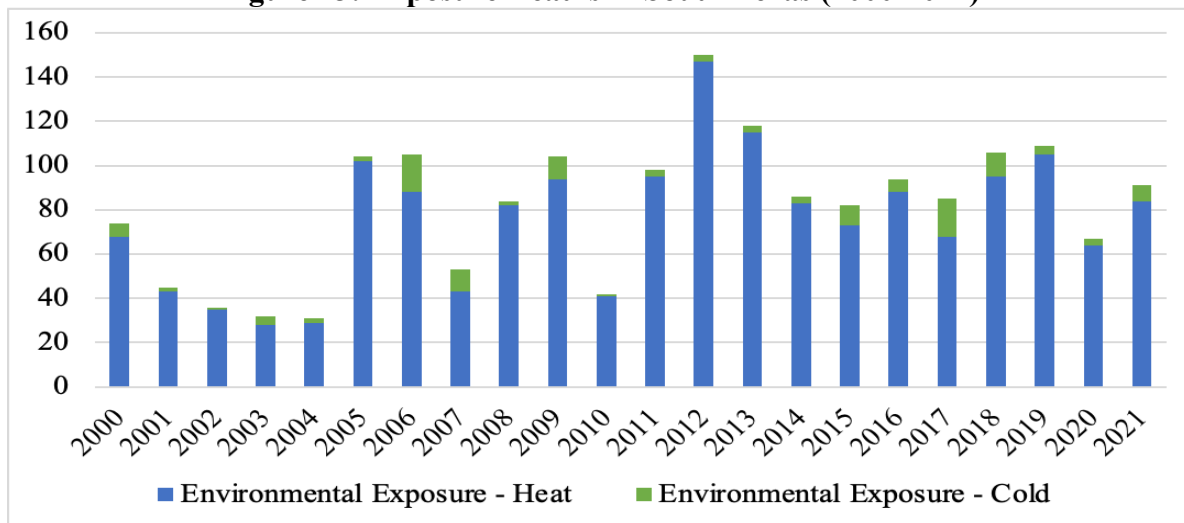


Authors' elaboration. Data source: U.S. Border Patrol

Over this period, the total number of exposure-related migrant deaths fluctuated across South Texas. On average, the Border Patrol recorded 76 deaths a year from heat exposure and 6 deaths a year from cold exposure. However, these numbers varied widely, with heat exposure deaths ranging from 28 cases to 147 cases a year and cold exposure deaths ranging from 1 to 17 deaths. Yet, since 2013, the total number of exposure-related deaths has remained relatively stable, with an average of 85 cases a year in South Texas.

^{xv} The Border Patrol uses two categories for exposure deaths: “environmental exposure - heat” and “environmental exposure - cold.” This section focuses on cases with this coding.

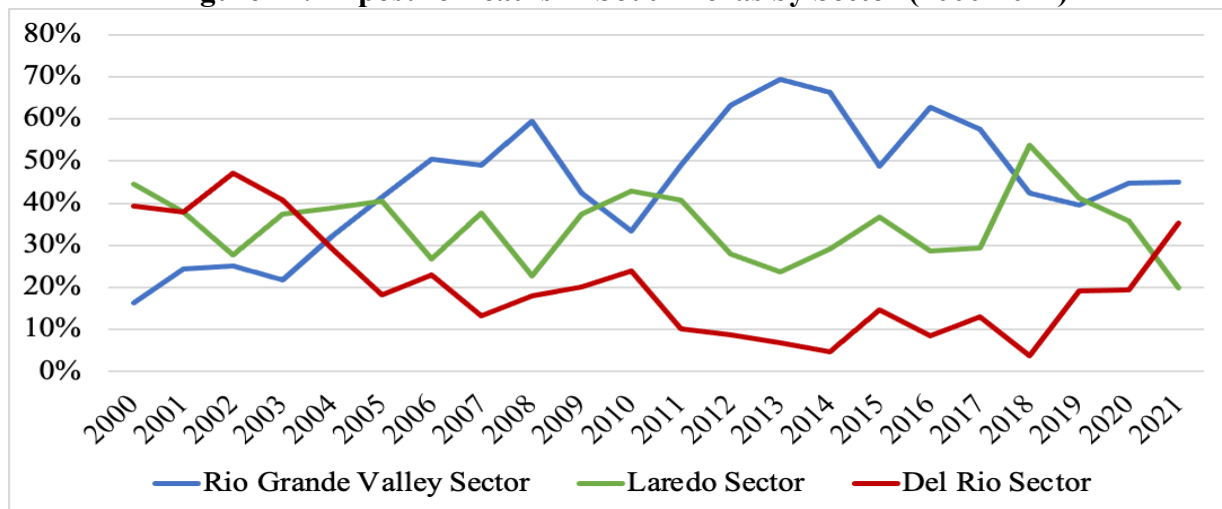
Figure 13: Exposure Deaths in South Texas (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

From 2000 to 2021, the number of migrants dying from exposure to the elements varied across the three Border Patrol sectors. Overall, the Border Patrol reported the highest number of exposure-related deaths in the Rio Grande Valley sector, with 48 percent of the dataset's total. The dataset also recorded that 34 percent of exposure deaths occurred in the Laredo sector and the remaining 18 percent in the Del Rio sector.

Figure 14: Exposure Deaths in South Texas by Sector (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

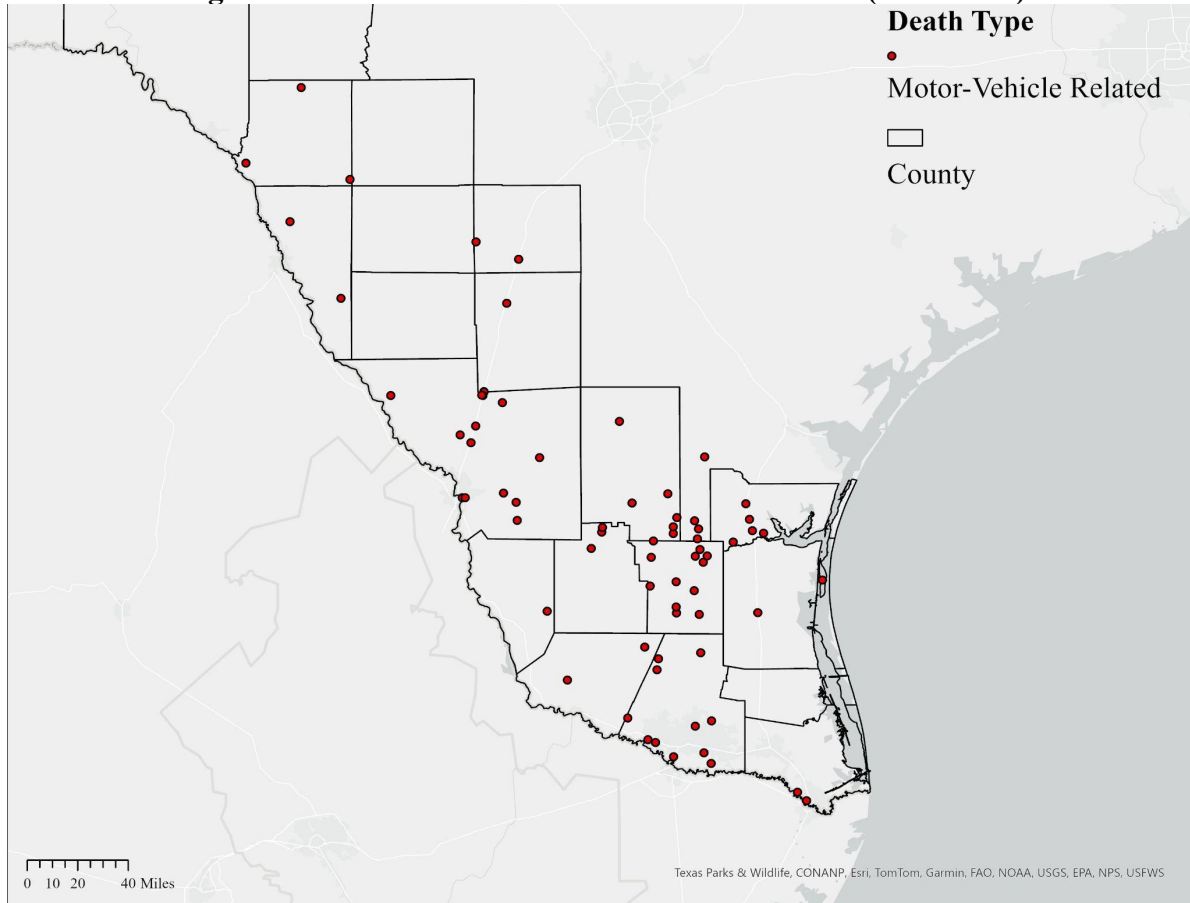
Vehicle-Related Deaths

From 2000 to 2021, the Border Patrol recorded 156 cases of migrants who died from vehicle-related accidents in South Texas.^{xvi} These deaths took place on South Texas' highways and local

^{xvi} The Border Patrol categorizes vehicle-related deaths as "motor vehicle related" in its datasets, which is the coding that is used in this section.

roads and occurred both along the Texas-Mexico border and in the state's interior. Many of these vehicle-related deaths occurred from car crashes, particularly during high speed pursuits, and suffocation in concealed spaces.⁸⁹

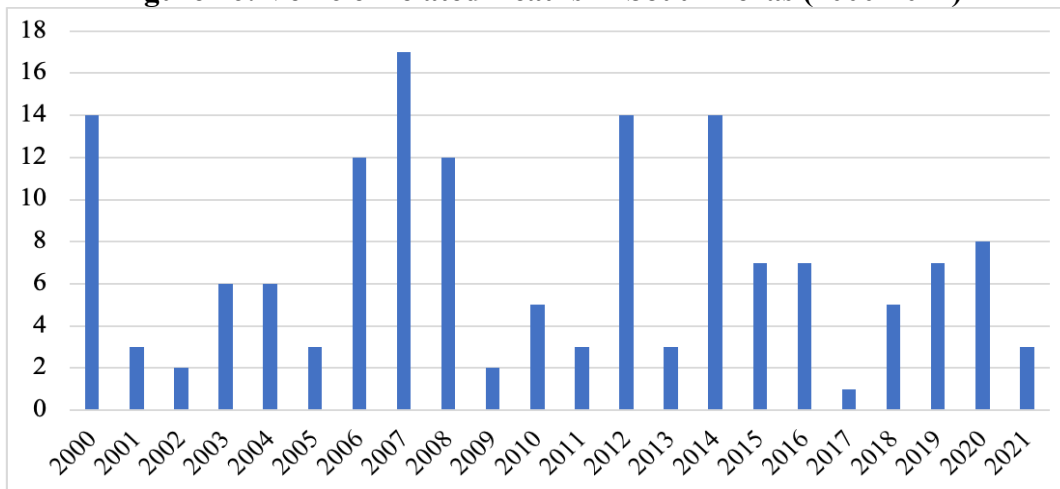
Figure 15: Vehicle-Related Deaths in South Texas (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

Over this period, the total number of migrants who died in vehicle-related accidents fluctuated across the region. On average, the Border Patrol's dataset reported eight deaths a year, but this number may represent a significant undercount. For example, the Border Patrol's dataset does not appear to include some of the most high-profile vehicle accidents involving migrants, such as the 2013 case in Victoria, Texas when 19 migrants died in the back of a tractor-trailer and the 2017 case in San Antonio where nine migrants suffocated in a tractor-trailer.⁹⁰

Figure 16: Vehicle-Related Deaths in South Texas (2000-2021)



Authors' elaboration. Data source: U.S. Border Patrol

The number of vehicle-related deaths also varied across the Border Patrol's three South Texas sectors. Overall, the Border Patrol's dataset reported the most vehicle-related deaths in the Laredo sector, with 47 percent of the total cases. The dataset also documented 40 percent of vehicle-related deaths within the Rio Grande Valley sector and the remaining 12 percent in the Del Rio sector.^{xvii} However, given the small number of vehicle-related migrant death cases, it was not possible to determine sector-level trends over time.

^{xvii} The percentages do not equal 100 percent due to rounding.

Chapter 3: The Border Patrol's Migrant Death Response

Historical Migrant Death Responses

In the 1980s, the Border Patrol launched its first efforts to respond to migrant deaths along the U.S.-Mexico border. At this time, a growing number of migrants were traveling through the Arizona-Sonora desert to look for work in the state's agricultural sector, and the trek offered a straight path to the area's biggest employers. However, as more people traveled through the desert, an increasing number began to die. From 1982 to 1986, authorities recovered 81 migrant remains in the Yuma, Arizona area of the desert, and local newspapers began to cover the issue.⁹¹

In response to these deaths, the Border Patrol initially provided its agents with additional training. During the summer of 1986, the Border Patrol launched the Yuma sector's Desert Area Rescue Team and the Tucson sector's Star Team to prevent migrant deaths.⁹² The Desert Area Rescue Team aided local sheriffs in rescuing migrants who were facing heat exhaustion and dehydration, and these agents also helped recover and document migrant remains.⁹³ Meanwhile, the Star Team trained nine agents in emergency first aid, rappelling, and tracking techniques for canyon rescues. These nine agents operated in the 300-mile area between New Mexico and Yuma County.⁹⁴

The following decade, in 1996, the Border Patrol launched Operation Lifesaver, which was the agency's first Texas-based migrant death response. Operation Lifesaver gave Border Patrol agents additional equipment for administering aid to people in distress, with a particular focus on migrants who were circumventing the Sarita Border Patrol checkpoint in Kenedy County.⁹⁵ As part of Operation Lifesaver, the Border Patrol deployed agents with emergency medical training to each station and agents were required to keep water and first-aid kits in their vehicles.⁹⁶

In 1998, INS launched its first border-wide response to migrant deaths through the Border Safety Initiative. This public safety plan emerged after the Border Patrol rolled out its 1994 Prevention Through Deterrence strategy and more migrants began dying in remote border areas. The Border Safety Initiative aimed to reduce injuries and prevent migrant fatalities, and covered three elements: prevention, search and rescue, and the identification of migrant remains.⁹⁷

The Border Safety Initiative involved a range of specific activities. The initiative's prevention-related activities focused on deterring would-be migrants from embarking on the journey. These activities included deploying Border Patrol agents and surveillance technology to dangerous areas, placing warning signs at major transportation centers on both sides of the border, and expanding public information campaigns in Mexico and the United States about migration dangers.⁹⁸

The Border Safety Initiative's two other pillars—search and rescue and the identification of migrant remains—also included various activities. The initiative's search and rescue elements focused on training Border Patrol agents in emergency medical responses and water rescues, developing toll-free numbers in Mexico and the United States for individuals to report migrants in danger, and installing rescue beacons in remote areas along the border.⁹⁹ The identification activities centered on identifying migrants' remains and returning them to family members in the United States or countries of origin.¹⁰⁰

In the late 1990s, the Border Patrol also launched its Border Patrol Search Trauma and Rescue unit (BORSTAR). BORSTAR agents undergo specialized training related to emergency rescue, such as emergency medical treatment, swift-water recovery, and navigation. Currently, every Border Patrol sector maintains a BORSTAR unit.¹⁰¹ These units have high standards for their agents and a rigorous selection process. In 2022, the Border Patrol received 139 candidates for its five-week BORSTAR selection and training course. From these applications, the agency selected 44 candidates and only 13 graduated from the program.¹⁰² As of 2019, BORSTAR agents made up approximately 2 percent of Border Patrol personnel.¹⁰³

In 2000, the Border Patrol also launched the Border Safety Initiative Tracking System (BSITS). Border Patrol agents use BSITS to document recovered migrant remains, including the cause of death, recovery location, and the decedent's sex, age, and nationality. Border Patrol agents publish this data and use it to identify trends and high-risk areas.¹⁰⁴ However, various actors have periodically accused the Border Patrol of failing to record all migrant deaths.¹⁰⁵ For example, in April 2022, a U.S. Government Accountability Office report found that Border Patrol agents had not consistently documented migrant deaths along the border.¹⁰⁶ In particular, the report alleged that the Border Patrol was "not recording all migrant deaths in instances where an external entity first discovers the remains."¹⁰⁷ Given these data limitations, the Border Patrol's official migrant death numbers—which this report analyzed in Chapter Two—are likely undercounts.

The Border Patrol's Missing Migrant Program

In 2017, the Border Patrol launched its most recent response to migrant deaths: the Missing Migrant Program. The program has its origins in a small 2015 Tucson sector initiative that carried out search and rescue operations and helped identify migrant remains. This team quickly became the sector's point people for coordinating with multiple governmental and non-governmental entities. In 2016, the Border Patrol launched a similar group in the Rio Grande Valley sector, and the following year, the agency expanded the program border-wide.

The Missing Migrant Program has four primary pillars: 1) prevent migrant deaths, 2) locate missing migrants and migrant remains, 3) identify migrant remains, and 4) reunite deceased migrants with their loved ones.^{108xviii} In order to achieve the first operational pillar of preventing migrant deaths, the program engages in a series of initiatives along the U.S.-Mexico border. These initiatives include placing rescue beacons and 911 placards in the ranchland around the Border Patrol's highway checkpoints and in remote areas near the Rio Grande. The following sections cover each of these specific death prevention activities.

^{xviii} For the first few years, the Missing Migrant Program had no standard operating procedures and each sector's program developed its own operational guidelines. However, in September 2021, the Border Patrol issued the Missing Migrant Program's Internal Operating Procedures to help standardize the program across all sectors. This guidance established agents' roles and responsibilities and the processes for responding to external entities' inquiries. Missing Migrant Program coordinators in each sector also began holding weekly meetings to discuss concerns and share best practices. In October 2023, the Border Patrol reported that it had updated its Missing Migrant Program's guidance to improve migrant death reporting practices, and, as of January 2024, the agency's leadership was reviewing this new guidance.

Rescue Beacons

The Border Patrol places rescue beacons in remote locations along the border to provide a way for migrants to seek medical assistance. These beacons are 35-foot-tall solar-powered units that are equipped with high-visibility strobe lights, so that migrants can see them from a distance.¹⁰⁹ Once a migrant approaches the beacon, a sign instructs the individual to push a red button if they need help (see Figure 17). Border Patrol agents then use the beacon's camera system to remotely view the migrant and determine the appropriate response.¹¹⁰

For 22 years, the Border Patrol has deployed rescue beacons along the border. In March 2002, the agency deployed its first six beacons in the Yuma sector and, in the following years, it steadily added beacons to most of its other border sectors.¹¹¹ As of August 2023, the Border Patrol had deployed 174 rescue beacons along the entire U.S.-Mexico border.^{112xix} This report estimates that this includes approximately 68 rescue beacons across South Texas, with around 46 rescue beacons in the Rio Grande Valley sector, 14 beacons in the Laredo sector, and 8 beacons in the Del Rio sector.¹¹³ Overall, roughly 40 percent of the Border Patrol's rescue beacons are located in South Texas, with the majority deployed near the agency's interior checkpoints.

Over the years, the Border Patrol has deployed two types of rescue beacons. The Border Patrol's original rescue beacons were "fixed" to their locations. However, the agency has steadily transitioned to "mobile" beacons, which agents can more easily move in response to changing dynamics.^{114xx} These mobile beacons are also more popular with landowners in South Texas, who control Border Patrol's death prevention activities on their property. The Border Patrol has also equipped some beacons with a Dejero, which creates connectivity for the beacon by serving as a mobile transmitter and internet gateway.

^{xix} In 2019, the Missing Persons and Unidentified Remains Act called for the Border Patrol to "purchase, deploy, and maintain" up to 170 rescue beacons along the border.

^{xx} The Missing Migrant Program uses a range of factors to determine where to place its rescue beacons. In June 2021, the Border Patrol established a model for standardizing rescue beacon placements that uses weighted operational and environmental variables. In particular, the Border Patrol includes current traffic patterns (20 percent weight), discovered migrant deaths (20 percent weight), preferred land cover types (20 percent weight), a low degree of slope (15 percent weight), rescued subjects (10 percent weight), direction from previously discovered migrant deaths (5 percent weight), suitable elevation (5 percent weight), and proximity to roads (5 percent weight).

Figure 17: Photos of Rescue Beacons



Source: The report's authors

The Border Patrol tracks data for beacon activations and the associated migrant rescues. For fiscal year 2022, the Border Patrol reported that it had linked 214 rescues border-wide to beacon activations, including 65 rescues in the Rio Grande Valley sector.¹¹⁵ However, the rescue beacon activation data is not as straightforward. A June 2016 Border Patrol report noted that the agency's beacon activation data included not just migrants seeking assistance but also activations that were conducted for tests and technical issues.^{116xxi} In August 2023, the Border Patrol reported that it was working on capturing "the nature of distress" behind each beacon activation and on documenting the outcomes.¹¹⁷

911 Placards and Water Rescue Placards

The Border Patrol also places 911 placards in remote locations along the border that have cell phone coverage. These placards are white metal signs with a green cross that instruct migrants to call 911 for help. If a migrant calls 911, they will be routed to Border Patrol agents who use the placard's GPS-mapped location to find the individual. The placards are posted on fences, windmills, and other prominent landmarks.

In 2010, the Border Patrol began placing its first geo-located signs in South Texas. At this time, the Border Patrol's Laredo sector started the Deer Blind Initiative, which created small stickers for ranchers' deer blinds.^{118xxii} The stickers included GPS coordinates, the Border Patrol's phone number, and instructions to report any suspicious activity or migrant-related emergency. As of October 2016, the Border Patrol had placed 2,000 stickers on deer blinds across the Laredo sector.¹¹⁹

^{xxi} These discrepancies help explain how the Rio Grande Valley sector reported 482 beacon activations in fiscal year 2015, but only six rescued individuals.

^{xxii} Deer blinds are shelters or concealment devices for hunters.

In 2018, the Missing Migrant Program expanded this effort through its 911 placard initiative. In August 2018, the Border Patrol's Rio Grande Valley sector constructed and placed 99 placards around the Falfurrias and Sarita checkpoints.¹²⁰ By September 2021, the agency had deployed 1,400 placards within the sector.¹²¹ This initiative quickly spread to other parts of the border, and in August 2023, the Border Patrol reported that it had deployed 2,279 placards border-wide.¹²² Similar to rescue beacons, Border Patrol agents must obtain landowners' approval before placing any 911 placards on their land.

It is not clear if the Border Patrol systematically tracks data for 911 placard usage and any associated rescues. As of February 2021, the Border Patrol stated that it was building a tracking mechanism for 911 placards, and in August 2023, the agency linked 22 migrant rescues to these placards. However, in August 2023, the Border Patrol reported that it was still developing a tracking mechanism for evaluating 911 placards' effectiveness compared to rescue beacons, when considering cellular network coverage.¹²³

Since March 2023, the Border Patrol has also begun placing water rescue placards along the Rio Grande. These signs are similar to 911 placards and feature drowning warnings. Since 2023, the Border Patrol has installed more than 500 water rescue placards along the Rio Grande.¹²⁴ These placards allow agents to quickly locate an individual in distress. However, given the time necessary to respond to a migrant drowning in the Rio Grande, they are more relevant for recovering drowning victims' remains.

Primary Challenges for Death Prevention Activities

The Border Patrol's Missing Migrant Program faces various challenges when attempting to prevent migrant deaths along the U.S.-Mexico border. These include challenges related to the Border Patrol's dual role as an enforcement agency and a first responder, migrants' inability to use rescue beacons or 911 placards, and Border Patrol agents' varying responses once a migrant seeks assistance. The following section outlines each of these broad challenges and how they play out within South Texas.

The Border Patrol's Dual Role as an Enforcement Agency and a First Responder

The Border Patrol is primarily an enforcement-focused agency, with an official mandate to "detect and prevent the illegal entry of individuals into the United States."¹²⁵ However, for more than four decades, the Border Patrol has also responded to migrant deaths along the U.S.-Mexico border, most recently through the Missing Migrant Program. While these dual roles have coexisted for decades, they can generate at least two types of challenges for the agency's migrant death prevention activities.

First, any Missing Migrant Program activity must align with the Border Patrol's mission set and the U.S. federal government's guidelines. In particular, the death prevention activities cannot be perceived as aiding unauthorized migrants, which could include activities such as leaving water and electrolytes in remote locations. This balancing act limits the types of activities that the Missing Migrant Program can pursue and may sideline activities that could be effective in preventing deaths. Additionally, as a federal agency, the Border Patrol is bound by strict

procurement regulations that can, at times, constrain their access to rescue-related technologies, such as drones that carry heavy emergency supplies or certain robotic flotation devices.¹²⁶

The second challenge that stems from the Border Patrol's dual mandate is migrants' subsequent reluctance to seek assistance. Migrants are aware that if they call 911, they will be apprehended and likely deported. This means that migrants may refuse to use rescue beacons or call 911 until it is too late.^{127xxiii} Similarly, by the time that migrants are willing to seek medical help, they may lack sufficient cell phone service or battery to place a call, or be too far from a rescue beacon.¹²⁸ The United Nations High Commissioner for Refugees (UNHCR) has emphasized that only neutral actors should undertake humanitarian efforts as a result of similar challenges in other global contexts.^{129xxiv}

Migrants' Inability to Utilize Rescue Beacons or 911 Placards

For the Missing Migrant Program's rescue beacons and 911 placards to be effective, migrants must be able to use them. In South Texas, most clandestine migrants rely on guides to organize their transit across the international border and within the state's interior. These guides may be familiar with the location of various rescue beacons and 911 placards, but they may not communicate this information to migrants or point out these features along the way.¹³⁰ This is particularly the case for rescue beacons, as smugglers may view them as connected to Border Patrol surveillance and seek to avoid them.^{131xxv} As a result, migrants are unlikely to have information about rescue beacons or 911 placards and may not even immediately understand their purpose.

Migrants' ability to find 911 placards and rescue beacons is further complicated by various agency-level decisions and design features. In particular, the Border Patrol does not publicly release GPS coordinates for rescue beacons or 911 placards, which means that migrants cannot pre-download maps that could guide them to help during an emergency.¹³² While 911 placards do not have any external lighting, which may make them difficult to locate at night. This means that for migrants to take advantage of rescue beacons or 911 placards, they need to be lucky enough to stumble upon one while in distress.

Even if a migrant found a 911 placard, it does not guarantee that the individual could seek assistance. In this scenario, the migrant would need to have a cell phone, sufficient battery charge to make a call, and a connection to local cell towers. If the individual called 911 without being near a placard, emergency dispatchers would attempt to triangulate the individual's location using available cell towers, which may not provide a precise search area. In the Rio Grande Valley sector, Border Patrol agents have also begun asking migrants in distress to share their locations via the WhatsApp application.

^{xxiii} In 2021, a No More Deaths report quoted a BORSTAR supervisor as saying, "I couldn't tell you how many times groups and individuals have the opportunity to walk to the rescue beacon and push the button, but they don't because they're afraid of being apprehended."

^{xxiv} The United Nations High Commissioner on Refugees also emphasizes the need for independence, meaning that humanitarian actors must be autonomous and not influenced by political, economic, or military agendas.

^{xxv} Migrants may also avoid rescue beacons due to misinformation.

However, migrants in distress do not always call 911 and may reach out to loved ones in their countries of origin or in the United States. These family members may then call humanitarian organizations or their country's consular services to try to launch a search and rescue response.¹³³ As of April 2024, the Border Patrol did not have a single, designated phone number for receiving these types of urgent requests for assistance.

The Border Patrol's Varied Rescue Response

The Missing Migrant Program's rescue beacons and 911 placards provide migrants with tools to seek and receive assistance. However, their effectiveness depends on the Border Patrol's ability to respond in a timely manner. Currently, the agency opens a case and generally launches a rescue response if a migrant activates a beacon or calls 911. However, this response is influenced by a range of factors, including the preciseness of the location information, the time of day, available Border Patrol personnel, and the migrant's perceived medical state.¹³⁴ For example, Border Patrol agents may not launch a rescue if the location information is too broad—given the difficulty of finding someone without precise GPS coordinates—or they may wait until there is daylight.

As a result, the Border Patrol does not have a single standard rescue response—or estimated response time—for a migrant in distress. Depending on the aforementioned factors, migrants may need to wait for anywhere from one hour to 12 hours. The lengthier response times can mean life or death for some migrants. For example, in September 2023, the Falfurrias Border Patrol station received a call around midnight about a male migrant in the brush who was feeling sick and needed help, along with exact geo-coordinates. Almost 12 hours later, the Border Patrol assigned an agent to search for the migrant. However, by the time that the agent arrived on the scene, the man was already deceased.¹³⁵

Migrants who activate a rescue beacon or request assistance through a 911 call must also stay in their initial location. However, some individuals wander away as they become increasingly ill or after losing hope that Border Patrol agents are on their way. Alternatively, some individuals may start to feel better and attempt to continue their journey. If Border Patrol agents launch a search for a missing migrant, they may spend several hours looking for the individual.^{xxvi} If the search is unsuccessful or incomplete, these agents may provide a local Sheriffs' Office with GPS coordinates to continue the search with their own personnel.

^{xxvi} The exact search length varies on a case-by-case basis.

Chapter 4: Recommendations

For more than 100 years, migrants have died along the U.S.-Mexico border. These deaths can be traced back to the 1880s, when the U.S. Congress first banned certain populations from entering the country through ports of entry. During the following decades, additional restrictive immigration policies and related enforcement efforts broadened the banned population and made clandestine crossings more difficult and dangerous. These structural factors not only created and shaped migrant death dynamics, but also mean that any attempt to fully prevent these deaths would require broad changes that are beyond this project's scope.

Instead, this chapter aims to provide more narrow recommendations for the Border Patrol's Missing Migrant Program to better prevent migrant deaths in South Texas. These recommendations are divided into four categories and suggest that the program could: 1) collect additional data and evaluate its current death prevention activities, 2) take steps to improve rescue beacons and 911 placards, 3) expand local Missing Migrant Program best practices border-wide, and 4) explore new approaches to prevent migrant deaths. These recommendations will not fully eliminate migrant deaths in South Texas—given that they do not address the previously mentioned structural factors—but they can help reduce these deaths' frequency.

1. Collect Additional Data and Evaluate Rescue Beacons and 911 Placards

In 2017, the Border Patrol launched the Missing Migrant Program border-wide and has steadily placed more rescue beacons and 911 placards along the border. However, seven years later, the Border Patrol has still not conducted any comprehensive evaluations of these activities. This report recommends that the Missing Migrant Program evaluate rescue beacons and 911 placards' effectiveness in reducing migrant deaths across different parts of the border. To do so, it recommends first collecting additional, standardized data.

- ***Collect additional data on rescue beacons and 911 placards.*** To evaluate rescue beacons and 911 placards' effectiveness in reducing migrant deaths, the Border Patrol needs to collect additional information about these activities. Over the past few years, the agency has collected data about total beacon activations and rescue beacon- and 911 placard-related migrant rescues.^{136xxvii} However, this report recommends that the Border Patrol should collect additional data to allow for more comprehensive evaluations. In particular, it suggests that the Border Patrol should track: 1) the dates when each beacon or placard was deployed, 2) the specific instances when a migrant activated a beacon or mentioned a placard in a 911 call, 3) the time between the request for help and agents' arrival on the scene and, 4) the number of resulting migrant rescues or remains recoveries. This information should be at the individual rescue beacon or 911 placard level in order to combine with broader geo-located data on migrant deaths, migrant rescues, and apprehensions.

^{xxvii} This aligns with the Missing Persons and Unidentified Remains Act Of 2019, which requires that the Border Patrol provide Congress with the number of rescue beacons in each Border Patrol sector, the location of each rescue beacon, and each beacon's total activations.

- ***Clarify and standardize definitions.*** To collect accurate data, Border Patrol agents need to operate with a shared definition of key concepts. However, currently, some of the main Missing Migrant Program concepts—particularly what constitutes a “migrant rescue”—are not standardized across Border Patrol sectors. The latest version of the BSITs user manual defines a migrant rescue as “[t]he rescue of an individual: 1) Where lack of intervention by the Border Patrol could result in imminent death or serious bodily injury, and 2) The incident occurs within designated target zone.”¹³⁷ This report recommends that the Border Patrol further clarify this particular definition and ensure that all personnel are applying key definitions consistently.
- ***Evaluate rescue beacons and 911 placards’ effectiveness.*** Over the past seven years, the Missing Migrant Program has steadily expanded its use of rescue beacons and 911 placards in South Texas to prevent migrant deaths. However, during this time, the Border Patrol has not conducted any programmatic evaluations of these activities. In April 2023, the U.S. Government Accountability Office published a report that called for a comprehensive review of the Missing Migrant Program activities every six months.¹³⁸ This report recommends the Border Patrol’s Missing Migrant Program, or an external entity, undertake a comprehensive evaluation of rescue beacons and 911 placards’ effectiveness for reducing migrant deaths. This type of evaluation would determine these activities’ overall effectiveness and how they could be improved. These evaluations should be sector-specific or regional to consider the ways that varying geographies and border dynamics affect their effectiveness.
- ***Publish the Missing Migrant Program’s evaluation results and underlying data.*** Once the Border Patrol’s Missing Migrant Program, or an external entity, completes their evaluation of rescue beacons and 911 placards’ effectiveness, this report recommends that the agency publish these results and the underlying data. These results and data would allow for outside experts and groups to gain a better understanding of rescue beacons and 911 placards’ effectiveness in reducing migrant deaths and make recommendations on how to improve these activities.

2. Improve Rescue Beacons and 911 Placards

In 2002, the Border Patrol placed its first rescue beacons in the Yuma desert, and, in 2010, the agency set up its first geo-located signs on South Texas ranches. Over the years, the Border Patrol has sought to increase these initiatives’ effectiveness and adapt them to local dynamics. For example, the Border Patrol’s rescue beacons are now mobile instead of fixed, and current 911 placards are metal signs instead of stickers. This report recommends that the Border Patrol continue enhancing its rescue beacons and 911 placards to increase their life-saving potential. It specifically suggests adding two-way communication features and cell service to all rescue beacons, equipping the beacons with essential items and shade provisions, and improving placards’ visibility at night.

Rescue Beacons

- ***Add two-way communication and cell service to all rescue beacons.*** When migrants activate a rescue beacon, it sends a signal to Border Patrol agents.¹³⁹ These agents then use the beacon's camera system to assess the situation and determine the appropriate response. However, not all beacons have two-way communication, which could keep migrants informed about their rescue and estimated wait time. This report suggests equipping all rescue beacons with two-way communication to increase the chances that the individual stays at the rescue beacon. Products such as a Dejero could provide this technology and also extend cell phone service within a designated range.¹⁴⁰ This improvement would benefit all individuals in the surrounding area, including migrants who are not at a beacon but need to call 911.
- ***Equip beacons with essential items and a shade provision.*** In South Texas, most migrants who activate a rescue beacon are likely suffering from heat exposure and dehydration. To immediately assist these individuals, rescue beacons could include essential items, such as water bottles, electrolyte tabs, non-perishable packaged food, and first aid kits. In order to safeguard these provisions, the items could be kept in a call-activated lockbox. Additionally, rescue beacons in sunny areas could include a mobile shade provision, similar to an awning, that would protect individuals while they wait for Border Patrol agents.

911 Placards and Water Rescue Placards

- ***Make all new placards visible at night.*** Current rescue placards are made with regular paint and placed on a variety of fixtures, such as fences and trees. As a result, migrants may not always be able to see them at night, which is important since migrants often travel through ranchland in the dark to avoid detection and the hottest hours of the day. To make these placards more visible at night, this report suggests incorporating glow-in-the-dark materials for any new 911 placards, such as certain forms of paint or a reflective sticker.

3. Expand the Missing Migrant Program's Best Practices

Along the U.S.-Mexico border, each Border Patrol sector has its own Missing Migrant Program. These programs operate under standardized guidance, but they also adapt their activities to local dynamics. This report recommends that some of the Missing Migrant Program's most successful sector-level activities be expanded border-wide. In particular, it recommends expanding both the use of WhatsApp location sharing and partnerships with local actors to continue unsuccessful missing migrant searches.

- ***Expand use of WhatsApp location sharing.*** When a migrant calls 911, the dispatcher attempts to pinpoint the caller's location by triangulating the signal between local cell towers. However, depending on the caller's location, this triangulation may yield large search areas that make it impossible to locate the individual. The Border Patrol's Missing Migrant Program in the Rio Grande Valley has addressed this issue by piloting an innovative effort to incorporate WhatsApp's location sharing into its search and rescue efforts. When migrants call 911 in South Texas, Border Patrol agents ask them to call a specific cell phone number and share their location via WhatsApp. These agents then have

more precise GPS coordinates to find individuals in distress, and have subsequently increased their success rate for rescues. This report recommends that all Border Patrol sectors along the U.S.-Mexico border implement WhatsApp location sharing for migrants seeking assistance.

Once this initiative is more established, this report recommends that Border Patrol's Missing Migrant Program place stickers with scannable QR codes on 911 placards. This could allow migrants to scan the sticker, access the sector's WhatsApp number, share their GPS coordinates, and receive emergency assistance.

- ***Expand partnerships with local actors for search and rescue operations.*** Border Patrol agents who respond to a 911 call or beacon activation may not always be able to locate the migrant in distress. These agents may search for several hours but then call off the search. In these cases, Border Patrol agents may provide this search information to local law enforcement to continue searching for the individual. This report recommends that the Border Patrol create guidelines that standardize this approach for all counties. This would allow local South Texas law enforcement to continue searching for the missing individual.

4. Explore New Approaches to Prevent Migrant Deaths

Over the past seven years, the Missing Migrant Program's primary death prevention activities have remained focused on rescue beacons and 911 placards. This report recommends that the Missing Migrant Program explore new approaches and technologies to prevent migrant deaths. These new efforts could include establishing phone numbers for family members to report migrants in distress, standardizing intake questions to ask about missing migrants, publishing rescue beacon locations, utilizing robotic flotation devices for migrant drownings in the Rio Grande, and using drones for search and rescue operations.

- ***Create telephone and WhatsApp numbers for family members to seek immediate help.*** Migrants frequently send their family members updates on their journeys and may also share their GPS coordinates. However, if the individual has an emergency, family members may not know how to activate an urgent search and rescue response and may spend critical time figuring out the appropriate reporting steps. This report recommends developing an international phone number and WhatsApp number that families can contact for time-sensitive rescues. This recommendation is not new. In 1998, the Border Security Initiative promised to create a 1-800 number for families to report missing loved ones.¹⁴¹ However, this type of reporting channel never materialized.
- ***Add an intake question about missing migrants.*** When Border Patrol agents apprehend a migrant, they collect basic information about the apprehended individual. However, apprehended migrants may also possess crucial information about group members who disappeared in the Rio Grande or were left behind in ranchland.¹⁴² This report recommends that Border Patrol agents add an intake question that asks about any migrants who were left behind during their most recent journey. This question could generate information to help save lives or recover deceased individuals' remains.

- ***Publish rescue beacon locations.*** In order to use rescue beacons, migrants need to be able to find them. However, the Border Patrol does not disclose its rescue beacon locations, amid concerns that any maps could assist migrants and smugglers.^{xxviii} However, smugglers are likely already aware of rescue beacons' locations and, if anything, try to avoid them since they have motion detecting cameras. This report recommends that the Border Patrol publish the beacons' locations in a downloadable map. This would allow migrants to access the beacons' locations without cell service. Given potential landowner concerns, this type of information could be initially piloted with rescue beacons on public lands to see if it increases beacon usage and migrant rescues.
- ***Invest in robotic flotation devices.*** Border Patrol agents often have to respond to migrants in distress in the Rio Grande. While the agency does not have standardized procedures for these rescues, agents are encouraged to respond with patrol boats or by throwing ropes and flotation devices from the shore. However, boats may not arrive in time and it can be difficult to throw flotation devices to individuals being swept downstream. To address this issue, this report recommends that the Border Patrol invest in robotic flotation devices. A Border Patrol agent could launch a robotic flotation device from the Rio Grande's bank and control the device through a remote control. For example, the Red Cross has already used the Emergency Integrated Lifesaving Lanyard (EMILY) to rescue migrants in the Mediterranean Sea.¹⁴³ This robotic flotation device is battery-powered, weighs 26 pounds, and can reach speeds of 23 miles per hour.¹⁴⁴
- ***Use drones for search and rescue.*** Currently, the Border Patrol uses drones for surveillance, but these tools could also be used for search and rescue operations. The Border Patrol's response time for a migrant in distress can mean life or death for the individual. Drones offer an efficient way to help find a missing migrant based on approximate GPS coordinates, and they could be equipped with life-saving resources, such as water, electrolytes, and first-aid kits.^{xxix} These drones could also be launched over popular Rio Grande crossing spots and drop flotation devices if necessary. This technology is already being piloted in other areas. This past year, New York City's Fire and Police Departments announced that they were looking to fly flotation-device-equipped drones along the city's beaches.¹⁴⁵

^{xxviii} In 2019, the Missing Persons and Unidentified Remains Act required the Border Patrol to disclose rescue beacon locations to Congress but not to the general public.

Endnotes

-
- ¹ Virginia Guedea, "The Process of Mexican Independence," *The American Historical Review* 105, no. 1 (2000): 116-130.
- ² Carlyn Osborn, "The Changing Mexico-U.S. Border: Worlds Revealed," The Library of Congress, December 18, 2015, blogs.loc.gov/maps/2015/12/the-changing-mexico-u-s-border/.
- ³ Osborn, "The Changing Mexico-U.S. Border: Worlds Revealed."
- ⁴ Osborn, "The Changing Mexico-U.S. Border: Worlds Revealed."
- ⁵ Osborn, "The Changing Mexico-U.S. Border: Worlds Revealed"; Douglas S. Massey, "The Mexico-U.S. Border in the American Imagination," *Proceedings of the American Philosophical Society* 160, no. 2 (June 2016): 160-177, 162.
- ⁶ Patrick Ettinger, *Imaginary Lines: Border Enforcement and the Origins of Undocumented Immigration, 1882-1930* (Austin: University of Texas Press, 2009).
- ⁷ Ettinger, *Imaginary Lines*, 19, 25-30; Roger Daniels, *Guarding the Golden Door: American Immigration Policy and Immigrants Since 1882* (New York: Hill and Wang, 2004), 12-16.
- ⁸ Stephanie Leutert and Maureen Rendon, "Clandestine Migration and Migrant Smuggling in South Texas," Robert Strauss Center for International Security and Law, May 2023, <https://www.strausscenter.org/wp-content/uploads/Clandestine-Migration-and-Migrant-Smuggling-1.pdf>; Massey, "The Mexico-U.S. Border in the American Imagination."
- ⁹ "Anti-Chinese Laws," UC Hastings College of the Law Library, Summer 2001, accessed April 3, 2024, <http://libraryweb.uchastings.edu/library/research/special-collections/wong-kim-ark/laws3.htm>.
- ¹⁰ *Head Money Cases*, 112 U.S. 580 (1884).
- ¹¹ *Chinese Exclusion Act*, Pub. L. No. 47-126, 22 Stat. 58.
- ¹² Daniels, *Guarding the Golden Door: American Immigration Policy and Immigrants Since 1882*, 18-20; Ettinger, *Imaginary Lines*, 40.
- ¹³ Erika Lee, "Enforcing the Borders: Chinese Exclusion along the U.S. Borders with Canada and Mexico, 1882-1924," *The Journal of American History* 89, no. 1 (June 2002): 63-72.
- ¹⁴ "Gentlemen's Agreement of 1907-1908," Immigration History, accessed April 12, 2024, <https://immigrationhistory.org/item/gentlemens-agreement/>.
- ¹⁵ *The Immigration Act of 1917*, Pub. L. No. 64-301, 39 Stat. 874.
- ¹⁶ *The Immigration Act of 1882*, Pub. L. No. 47-376, 22 Stat. 214.
- ¹⁷ Ettinger, *Imaginary Lines*, 20-25, 30-36, 71; Daniels, *Guarding the Golden Door: American Immigration Policy and Immigrants Since 1882*, 28.
- ¹⁸ *The Immigration Act of 1882*, Pub. L. No. 47-376, 22 Stat. 214.
- ¹⁹ *The Immigration Act of 1924*, Pub. L. No. 38-139, 43 Stat. 153.
- ²⁰ Ettinger, *Imaginary Lines*, 118-19, 124.
- ²¹ Ettinger, *Imaginary Lines*, 142-44, 150-51.
- ²² Ettinger, *Imaginary Lines*, 147.
- ²³ *The Emergency Quota Act*, Pub. L. No. 67-5, 42 Stat. 5.
- ²⁴ *The Immigration Act of 1924*, Pub. L. No. 38-139, 43 Stat. 153.
- ²⁵ *The Immigration Act of 1924*, Pub. L. No. 38-139, 43 Stat. 153.
- ²⁶ Massey, "The Mexico-U.S. Border in the American Imagination," 164.
- ²⁷ Kelly Lytle Hernandez, "How Crossing the US-Mexico Border Became a Crime," *The Conversation*, April 30, 2017, <https://theconversation.com/how-crossing-the-us-mexico-border-became-a-crime-74604>.
- ²⁸ Ettinger, *Imaginary Lines*, 151, 165.
- ²⁹ Abraham Hoffman, *Unwanted Mexican Americans in the Great Depression. Repatriation Pressures 1929-1939* (Tucson: The University of Arizona Press, 1947).
- ³⁰ *Undesirable Aliens Act*, Pub. L. No. 70-1018, 690, § 2, 45 Stat. 1551.
- ³¹ Hernandez, "How Crossing the US-Mexico Border Became a Crime"; *Undesirable Aliens Act*, Pub. L. No. 70-1018, 690, § 2, 45 Stat. 1551.

-
- ³² Hernandez, “How Crossing the US-Mexico Border Became a Crime.”
- ³³ “Research Guides: Civil Rights Cases and Events in the United States: 1942: Bracero Program,” Library of Congress, accessed January 25, 2024, <https://guides.loc.gov/latinx-civil-rights/bracero-program>.
- ³⁴ Deborah Kang, *The INS on the Line: Making Immigration Law on the US-Mexico Border, 1917-1954* (New York: Oxford University Press, 2017).
- ³⁵ Kitty Calavita, *Inside the State: The Bracero Program, Immigration, and the I.N.S.* (New Orleans: Quid Pro, LLC, 1992).
- ³⁶ Philip Martin, “Mexican Braceros and US Farm Workers,” Woodrow Wilson Center, July 10, 2020, <https://www.wilsoncenter.org/article/mexican-braceros-and-us-farm-workers>.
- ³⁷ “Depression and the Struggle for Survival: Mexican: Immigration and Relocation in U.S. History,” Library of Congress, accessed April 18, 2024, <https://www.loc.gov/classroom-materials/immigration/mexican/depression-and-the-struggle-for-survival/>.
- ³⁸ Peter N. Kirstein, “Agribusiness, Labor, and the Wetbacks: Truman’s Commission on Migratory Labor,” *The Historian* 40, no. 4 (1978), 650-667.
- ³⁹ “Bracero Agreement (1942-1964),” Immigration History, accessed April 15, 2024, <https://immigrationhistory.org/item/bracero-agreement/>.
- ⁴⁰ “The Bracero Program,” Colorado Oral History Migratory Labor Project, accessed April 18, 2024, https://www.unco.edu/colorado-oral-history-migratory-labor-project/pdf/Bracero_Program_PowerPoint.pdf.
- ⁴¹ D’Vera Cohn, “How U.S. Immigration Laws and Rules Have Changed through History,” Pew Research Center, September 30, 2015, <https://www.pewresearch.org/short-reads/2015/09/30/how-u-s-immigration-laws-and-rules-have-changed-through-history/>.
- ⁴² D’Vera Cohn, “How U.S. Immigration Laws and Rules Have Changed through History.”
- ⁴³ U.S. Customs and Border Protection, “United States Border Patrol, Southwest Border Sectors: Total Encounters by Fiscal Year,” accessed March 6, 2024, <https://www.cbp.gov/sites/default/files/assets/documents/2021-Aug/US59B8~1.PDF>.
- ⁴⁴ “Immigration Reform and Control Act (IRCA),” Immigration History, accessed April 4, 2024, <https://immigrationhistory.org/item/1986-immigration-reform-and-control-act/>.
- ⁴⁵ Donald Kerwin, “From IIRIRA to Trump: Connecting the Dots to the Current US Immigration Policy Crisis,” *Journal on Migration and Human Security* 6, no. 3 (September 1, 2018): 192-204.
- ⁴⁶ Ettinger, *Imaginary Lines*.
- ⁴⁷ Ettinger, *Imaginary Lines*.
- ⁴⁸ Kelly Lytle Hernandez, *Migra! A History of the U.S. Border Patrol* (Oakland: University of California Press, 2010).
- ⁴⁹ U.S. Customs and Border Protection, “Border Patrol History,” accessed April 13, 2024, <https://www.cbp.gov/border-security/along-us-borders/history>.
- ⁵⁰ Lytle Hernandez, *Migra!*
- ⁵¹ Lytle Hernandez, *Migra!*
- ⁵² Kang, *The INS on the Line*.
- ⁵³ “Depression and the Struggle for Survival,” Library of Congress, accessed April 13, 2024, [https://www.loc.gov/classroom-materials/immigration/mexican/depression-and-the-struggle-for-survival/#:~:text=The%20Great%20Depression%20of%20the,face%20an%20additional%20threat%3A%20deportation](https://www.loc.gov/classroom-materials/immigration/mexican/depression-and-the-struggle-for-survival/#:~:text=The%20Great%20Depression%20of%20the,face%20an%20additional%20threat%3A%20deportation;); Lytle Hernandez, “How Crossing the US-Mexico Border Became a Crime.”
- ⁵⁴ Lyle Saunders and Olen Earl Leonard, *The Wetback in the Lower Rio Grande Valley of Texas* (Austin: University of Texas, 1951); Julian Samora, *Los Mojados: The Wetback Story* (South Bend: University of Notre Dame, 1971).
- ⁵⁵ “Patrol Deploys by Hundreds,” *The Brownsville Herald*, 1954, 1; “Operation Wetback,” Immigration History, accessed April 8, 2024, <https://immigrationhistory.org/item/operation-wetback/>.
- ⁵⁶ “Border Patrol Tightens Defenses for New Rush to Cross into U.S.,” *The Los Angeles Times*, September 22, 1947; U.S. Customs and Border Protection, “Kingsville Station,” accessed February 3, 2024,

<https://www.cbp.gov/border-security/along-us-borders/border-patrol-sectors/rio-grande-valley-sector-texas/kingsville-station>; U.S. Customs and Border Protection, “Falfurrias Station,” accessed February 3, 2024, <https://www.cbp.gov/border-security/along-us-borders/border-patrol-sectors/rio-grande-valley-sector-texas/falfurrias-station>.

⁵⁷ “Sarita checkpoint increase in personnel from 38 to 58,” *Corpus Christi Caller-Times*, January 28, 1993, 7; “On The Front Lines of the Border Crisis: A Hearing with Chief Patrol Agents,” 118th Congress (2023-2024), House Oversight and Accountability Committee, February 7, 2023; ⁵⁷ U.S. Customs and Border Protection, “Smugglers Use Trains and Vehicle Trunks to Transport Migrants,” June 25, 2021, <https://www.cbp.gov/newsroom/local-media-release/smugglers-use-trains-and-vehicle-trunks-transport-migrants>; “Immigration Officials Nab Many Aliens,” *Austin American-Statesman*, July 15, 1948, 10.

⁵⁸ Douglas S. Massey and Karen A. Pren, “Unintended Consequences of US Immigration Policy: Explaining the Post-1965 Surge from Latin America,” *Population and Development Review* 38, no. 1 (2012): 28-29.

⁵⁹ Massey and Pren, “Unintended Consequences of US Immigration Policy.”

⁶⁰ Timothy J. Dunn, *The Militarization of the U.S.-Mexico Border, 1978-1992: Low-Intensity Conflict Doctrine Comes Home* (Austin: University of Texas Press, 1996), 35-102.

⁶¹ Dunn, *The Militarization of the U.S.-Mexico Border*.

⁶² Frank Bean, Roland Chanove, Robert G. Cushing, Rodolfo de la Garza, Gary P. Freeman, Charles W. Haynes, and David Spener, “Illegal Mexican Migration and the United States/Mexico Border: The Effects of Operation Hold the Line on El Paso/Juárez,” U.S. Commission on Immigration Reform, 1994, 93.

⁶³ Bean, et al., “Illegal Mexican Migration & the United States/Mexico Border,” 93.

⁶⁴ David Spener, *Clandestine Crossings: Migrants and Coyotes on the Texas-Mexico Border* (Ithaca: Cornell University Press, 2009).

⁶⁵ Bean, et al., “Illegal Mexican Migration & the United States/Mexico Border,” 93.

⁶⁶ U.S. Border Patrol, “Border Patrol Strategic Plan 1994 and Beyond,” 1994.

⁶⁷ Spener, *Clandestine Crossings*.

⁶⁸ Robert Lee Maril, *Patrolling Chaos: the U.S. Border Patrol in Deep South Texas* (Lubbock: Texas Tech University Press, 2004),

⁶⁹ “Mexicans drown in Rio Grande,” *Arizona Republic*, September 8, 1920, 1.

⁷⁰ “Mexicans drown in Rio Grande.”

⁷¹ Associated Press, “Aleman Pleads to ‘Wet Backs’: Immigration Chief Urges Mexican Farm Laborers to Use Bridges,” *The New York Times*, 1949, 5.

⁷² Saunders and Leonard, *The Wetback in the Lower Rio Grande Valley of Texas*, 38.

⁷³ Pamela Lyon, “Border drownings rise with illegal alien increase,” *Corpus Christi Caller-Times*, February 20, 1980, 1.

⁷⁴ Carol Merelle, “Illicit crossings go on, despite boxcar deaths,” *The Philadelphia Inquirer*, July 19, 1987.

⁷⁵ Jesse Katz, “Floaters: Death in the Rio Grande,” *The Los Angeles Times*, March 27, 1996, 1.

⁷⁶ “Know Your Rights: 100 Mile Border Zone,” American Civil Liberties Union, accessed February 14, 2024, <https://www.aclu.org/know-your-rights/border-zone>.

⁷⁷ “Left to Die: Border Patrol, Search and Rescue, and the Crisis of Disappearance,” No More Deaths and La Coalición de Derechos Humanos, February 2021.

⁷⁸ Samora, *Los Mojados*, 107-127.

⁷⁹ Jeanne Russell, “Heat kills three women skirting checkpoints,” *The Monitor*, May 31, 1996, 1.

⁸⁰ Marisa Taylor, “Officials hope TV spot deters illegal immigrants,” *The Monitor*, August 18, 1996.

⁸¹ Dave Harmon, “As Drought Deepens, More Die Crossing Parched Terrain,” *Austin American-Statesman*, July 11, 1998, 1.

⁸² Taylor, “Officials hope TV spot deters illegal immigrants.”

⁸³ Harvey Scandrett, “The Border Patrol and the Wetbacks,” *Hartford Courant*, March 28, 1948, 77.

⁸⁴ Associated Press, “Two caught smuggling Mexicans: Aliens’ Death Clues Sought,” *Lubbock Avalanche-Journal*, October 2, 1968, 2.

-
- ⁸⁵ Cam Rossie, "Police seek two drivers in deaths of aliens," *Fort Worth Star-Telegram*, October 6, 1982, 1.
- ⁸⁶ "Suspected smuggler's case on hold," *Del Rio News Herald*, August 19, 1983, 1.
- ⁸⁷ U.S. Border Patrol, "U.S. Border Patrol Apprehensions From Mexico and Other Than Mexico (FY 2000 - FY 2020)," accessed April 12, 2024, <https://www.cbp.gov/sites/default/files/assets/documents/2021-Aug/U.S.%20Border%20Patrol%20Apprehensions%20From%20Mexico%20and%20Other%20Than%20Mexico%20%28FY%202000%20-%20FY%202020%29.pdf>; U.S. Border Patrol, "Nationwide Encounters," accessed April 12, 2024, <https://www.cbp.gov/newsroom/stats/nationwide-encounters>; Senora Scott, "Exclusive: Conversation with Del Rio sector deputy chief patrol agent Juan Bernal," *Concho Valley*, June 2, 2023, <https://www.conchovalleyhomepage.com/news/local-news/exclusive-conversation-with-del-rio-sector-deputy-chief-patrol-agent-juan-bernal/>.
- ⁸⁸ U.S. Customs and Border Protection, "Rescue Beacons and Unidentified Remains: Fiscal Year 2023 Report to Congress," August 2023.
- ⁸⁹ Norma Herrera, "So Much Blood on the Ground," Human Rights Watch, November 29, 2023, <https://www.hrw.org/report/2023/11/27/so-much-blood-ground/dangerous-and-deadly-vehicle-pursuits-under-texas-operation>.
- ⁹⁰ Jaden Edison and Patrick Svitek, "At Least 50 People Found Dead in Abandoned 18-Wheeler in San Antonio," *The Texas Tribune*, June 28, 2022, <https://www.texastribune.org/2022/06/27/bodies-18-wheeler-san-antonio-lackland/>.
- ⁹¹ Chris Bowman, "'Death march' across desert: Aliens risk it all for US jobs," *The Sacramento Bee*, September 21, 1986, A1.
- ⁹² Andy Hall, "US Law, Mexican Alert, Cut Desert's Death Toll," *Arizona Republic*, June 7, 1987, 21.
- ⁹³ Bill Curry, "Hunt for Better Life Leads Aliens to 'Season of Death'" *Los Angeles Times*, June 16, 1986.
- ⁹⁴ Dee Ralles, "Border Patrol's Tucson District Creates Desert-Rescue Team," *Arizona Republic*, July 6, 1986, 11.
- ⁹⁵ Novelda Sommers, "Border Patrol Not Always an Unwelcome Sight for Illegals," *Corpus Christi Caller-Times*, June 7, 1998, 8.
- ⁹⁶ Madeline Baro, "Heat proving deadly for illegal immigrants - Border Patrol boosts warning, rescue efforts," *Houston Chronicle*, July 20, 1998.
- ⁹⁷ U.S. Department of Justice, "INS Launches Unprecedented Borderwide Public Safety Initiative," June 16, 1998.
- ⁹⁸ U.S. Department of Justice, "INS Launches Unprecedented Borderwide Public Safety Initiative."
- ⁹⁹ U.S. Department of Justice, "INS Launches Unprecedented Borderwide Public Safety Initiative."
- ¹⁰⁰ U.S. Department of Justice, "INS Launches Unprecedented Borderwide Public Safety Initiative."
- ¹⁰¹ U.S. Government Accountability Office, "Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995: Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated," August 2006, 9-10.
- ¹⁰² Laura Villagran, "Border Patrol 'Search and Rescue' Agents Train to Save Lives," *El Paso Times*, August 27, 2022, <https://www.elpasotimes.com/story/news/2022/08/27/border-patrol-borstar-agents-train-dangerous-terrain/65459992007/>; U.S. Customs and Border Protection, "U.S. Border Patrol Specialty Units: Fiscal Year 2022 Report to Congress," February 14, 2022, 3.
- ¹⁰³ Kathryn Hampton, "Zero protection: How U.S. border enforcement harms migrant safety and health," Physicians for Human Rights, July 28, 2021, <https://phr.org/our-work/resources/zero-protection-how-u-s-border-enforcement-harms-migrant-safety-and-health/>.
- ¹⁰⁴ U.S. Government Accountability Office, "Illegal Immigration: Border-Crossing Deaths Have Doubled Since 1995," 11.
- ¹⁰⁵ Donald Kerwin, "Chaos on the U.S.-Mexico Border: A Report on the Migrant Crossing Deaths, Immigrant Families, and Subsistence-Level Laborers," Catholic Legal Immigration Network (CLINIC), At-Risk Immigrants Report Series, Washington, DC, 2001, <https://doi.org/10.14240/atriskreport5>; Andrea Almond, "Number of Deaths on US-Mexico Border Disputed," *Associated Press*, November 7, 2004; Bob

Ortega, "Border Patrol Failed to Count Hundreds of Migrant Deaths on US Soil," *CNN*, May 15, 2018, <https://www.cnn.com/2018/05/14/us/border-patrol-migrant-death-count-invs/index.html>.

¹⁰⁶ U.S. Government Accountability Office, "Southwest Border: Border Patrol's Missing Migrant Program," November 15, 2022, 7.

¹⁰⁷ U.S. Government Accountability Office, "Southwest Border: Border Patrol's Missing Migrant Program," 7.

¹⁰⁸ U.S. Customs and Border Protection, "Migrant Death Mitigation: Fiscal Year 2020 Report to Congress," February 12, 2021, 2; U.S. Government Accountability Office, "Southwest Border: CBP Should Improve Data Collection, Reporting, and Evaluation for the Missing Migrant Program," April 2022, 9-10; U.S. Government Accountability Office, "Border Security: Border Patrol's Missing Migrant Program," March 2024.

¹⁰⁹ U.S. Customs and Border Protection, "Border Patrol's Rescue Beacons and 911 Location Marker Project Continue to Save Lives," July 31, 2020, <https://www.cbp.gov/newsroom/local-media-release/border-patrol-s-rescue-beacons-and-911-location-marker-project-continue>.

¹¹⁰ U.S. Customs and Border Protection, "Border Patrol's Rescue Beacons and 911 Location Marker Project Continue to Save Lives."

¹¹¹ Brittany Polliard and Ryan Ruegg, "Rescue Beacons ('Panic Poles')," National Border, National Park: A History of Organ Pipe Cactus National Monument, accessed March 6, 2024, <https://organpipehistory.com/orpi-a-z/rescue-beacons-panic-poles/>.

¹¹² *The Missing Persons and Unidentified Remains Act Of 2019*. Pub. L. No.116-277; U.S. Customs and Border Protection, "Rescue Beacons and Unidentified Remains, Fiscal Year 2023 Report to Congress," August 2023; U.S. Border Patrol, Freedom of Information Act Request, received February 6, 2024.

¹¹³ U.S. Customs and Border Protection, "Rescue Beacons and Unidentified Remains, Fiscal Year 2023 Report to Congress."

¹¹⁴ U.S. Government Accountability Office, "Southwest Border: CBP Should Improve Data Collection, Reporting, and Evaluation for the Missing Migrant Program."

¹¹⁵ U.S. Customs and Border Protection, "Rescue Beacons and Unidentified Remains, Fiscal Year 2023 Report to Congress," 1; U.S. Border Patrol, Freedom of Information Act Request, received February 6, 2024.

¹¹⁶ U.S. Customs and Border Protection, "Search and Rescue Efforts for FY 2015," June 30, 2016, <https://www.dhs.gov/sites/default/files/publications/Customs%20and%20Border%20Protection%20-%20Search%20and%20Rescue%20Efforts%20for%20FY%202015.pdf>.

¹¹⁷ U.S. Customs and Border Protection, "Rescue Beacons and Unidentified Remains, Fiscal Year 2023 Report to Congress."

¹¹⁸ Noraida Negron, "Laredo Sector Border Patrol's Deer Blind Initiative Saves Lives," *KGNS News*, October 7, 2016, <https://www.kgns.tv/content/news/deer-blind-396305751.html>.

¹¹⁹ Negron, "Laredo Sector Border Patrol's Deer Blind Initiative Saves Lives"; CBP South Texas (@cpbsouthtexas), "#USBP Laredo Sector Border Patrol works with @KRGV to highlight Deer Blind Initiative, saves lives," November 16, 2016, Twitter post, <https://twitter.com/CBPSouthTexas/status/799333230545514496>.

¹²⁰ Oscar Margain, "Two Hondurans Rescued with Border Patrol's New Locator Signs," *KENS5 News*, August 31, 2018, <https://www.kens5.com/article/news/two-hondurans-rescued-with-border-patrols-new-locator-signs/273-589737820>.

¹²¹ U.S. Customs and Border Protection, "RGV Border Patrol Agents Provide Lifesaving Efforts," September 1, 2021, <https://www.cbp.gov/newsroom/local-media-release/rgv-border-patrol-agents-provide-lifesaving-efforts>.

¹²² U.S. Customs and Border Protection, "Programs and Special Operations. What Is the Missing Migrant Program?" August 18, 2022, <https://www.cbp.gov/border-security/along-us-borders/operations/special-operations>; U.S. Government Accountability Office, "Southwest Border: CBP Should Improve Data Collection, Reporting, and Evaluation for the Missing Migrant Program."

-
- ¹²³ U.S. Customs and Border Protection, "Migrant Death Mitigation: Fiscal Year 2020 Report to Congress," 2.
- ¹²⁴ U.S. Customs and Border Protection, "RGV Water Rescue Initiative Kicks Off to Save Lives in Remote and Inhospitable Areas," March 21, 2023, <https://www.cbp.gov/newsroom/local-media-release/rgv-water-rescue-initiative-kicks-save-lives-remote-and-inhospitable-0>.
- ¹²⁵ U.S. Customs and Border Protection, "Border Patrol Overview," accessed March 4, 2024, <https://www.cbp.gov/border-security/along-us-borders/overview#:~:text=While%20the%20Border%20Patrol%20has,individuals%20into%20the%20United%20States>.
- ¹²⁶ Meeting with South Texas fire department representatives, January 9, 2024.
- ¹²⁷ "Left to Die: Border Patrol, Search and Rescue, and The Crisis of Disappearance," No More Deaths and La Coalición de Derechos Humanos, February 2021.
- ¹²⁸ Tara Plath, "An Elusive Viewshed: An Investigation of United States' Border Patrol Rescue Beacons in Arizona's Western Desert," *Plot(s) Journal of Design Studies* 7 (2020): 35-37.
- ¹²⁹ "Humanitarian Principles," United Nations High Commissioner for Refugees, January 30, 2024, <https://emergency.unhcr.org/protection/protection-principles/humanitarian-principles>.
- ¹³⁰ Interview with rescue beacon expert, February 5, 2024.
- ¹³¹ Interview with migrant construction workers in Austin, TX, February 7, 2024; Interview with day laborers in Austin, TX, February 10, 2024.
- ¹³² Plath, "An Elusive Viewshed," 28; Interview with rescue beacon expert, February 5, 2024.
- ¹³³ "Left to Die: Border Patrol, Search and Rescue, and The Crisis of Disappearance."
- ¹³⁴ Interview with Sheriff's Office representative in South Texas, February 24, 2024.
- ¹³⁵ Brooks County Sheriff's incident report, September 15, 2023.
- ¹³⁶ *The Missing Persons and Unidentified Remains Act Of 2019*, Pub. L. No. 116-277.
- ¹³⁷ U.S. Border Patrol, "Border Safety Initiative Tracking System (BSITS) User Manual," November 2007.
- ¹³⁸ U.S. Government Accountability Office, "Southwest Border: CBP Should Improve Data Collection, Reporting, and Evaluation for the Missing Migrant Program."
- ¹³⁹ Nicole Ludden, "Border Patrol, Aid Groups Differ over Desert Rescue Beacons," *Tucson Sentinel*, May 20, 2019, https://www.tucsonsentinel.com/local/report/052019_rescue_beacons/border-patrol-aid-groups-differ-over-desert-rescue-beacons/.
- ¹⁴⁰ "Cell Phone Repeaters - What They Are & How They Work," *Waveform*, accessed November 13, 2023, <https://www.waveform.com/pages/cell-phone-repeaters#:~:text=A%20cell%20phone%20repeater%20>.
- ¹⁴¹ U.S. Department of Justice, "INS Launches Unprecedented Borderwide Public Safety Initiative."
- ¹⁴² "Left to Die: Border Patrol, Search and Rescue, and The Crisis of Disappearance."
- ¹⁴³ "Swimmers Rescued after Rip Current Pulls Them Out to Sea at Rockaway Beach," *KGW8*, July 9, 2019, <https://www.kgw.com/article/news/local/north-coast/three-swimmers-rescued-after-rip-current-pulls-them-out-to-sea-at-rockaway-beach/283-e4aa759f-bfbf-4693-b955-ae3031f96bcd>.
- ¹⁴⁴ "EMILY Robot," Hydronalix, accessed March 27, 2024, <https://www.emilyrobot.com/>.
- ¹⁴⁵ Thomas Tracy, "FDNY to Pilot Water Rescue Tech Dropped by Drone," *Government Technology*, October 10, 2023, <https://www.govtech.com/products/fdny-to-pilot-water-rescue-tech-dropped-by-drone>; Keely Quinlan, "NYPD to fly rescue drones over city beaches this summer," *State Scoop*, February 21, 2024, <https://statescoop.com/new-york-rescue-drones-flotation-devices-beaches/#:~:text=The%20drones%2C%20which%20Daughtry%20said,contact%20with%20water%2C%20he%20added>.

ISBN: 978-1-951006-20-4

